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March 8, 2004

Mary Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd Floor
Boston, Massachusetts 02110

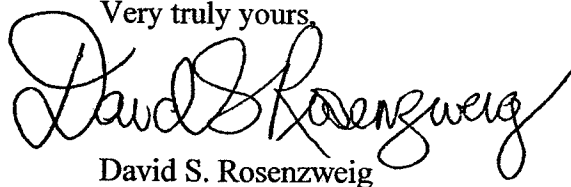
Re: NSTAR Electric, D.T.E. 03-121

Dear Secretary Cottrell:

Enclosed for filing in the above-referenced matter is an original and six (6) copies of NSTAR Electric's responses to the Information Requests on the accompanying list.

Thank you for your attention to this matter.

Very truly yours,



David S. Rosenzweig

Enclosures

cc: William Stevens, Hearing Officer
John-Cope Flanagan, Hearing Officer
Service List

Response to Information Requests

Information Request NEDGC-2-1
Information Request NEDGC-2-2
Information Request NEDGC-2-3
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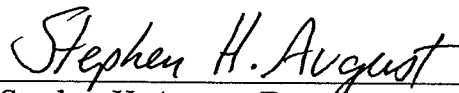
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

Boston Edison Company)
Cambridge Electric Light Company)
Commonwealth Electric Company)
d/b/a NSTAR Electric)

D.T.E. 03-121

CERTIFICATE OF SERVICE

I certify that I have this day served the foregoing documents upon the service list
in the above-docketed proceeding in accordance with the requirements of 220 C.M.R.
1.05.



Stephen H. August, Esq.
Keegan, Werlin & Pabian, LLP
265 Franklin Street
Boston, MA 02110
(617) 951-1400

Dated: March 8, 2004

Information Request NEDGC-2-1

Provide copies of all correspondence between the Company and customers who installed, or were at the time of such correspondence considering installing distributed generation within the NSTAR service territories. We would not object to redactions of customer names, addresses or other information specifically indentifying (sic) the customer.

Response

NSTAR Electric objects to this information request because the request is overly broad, burdensome and is not likely to lead to relevant evidence. In order to respond to the request, NSTAR Electric would be required to conduct an extensive search of its records to find correspondence between it and its customers. NSTAR Electric would need to review every piece of correspondence between it and its customers to determine, based on the subject of the correspondence, whether the customers was "considering installing distributed generation." Unless the installation of distributed generation was the subject of the correspondence, NSTAR Electric would have no way of knowing what a customer was "considering." The time and resources needed to conduct such a search would be enormous, and would far outweigh any probative material that could be uncovered. The scope of this proceeding will address the costs incurred to provide standby service to customers with self-generation facilities and related ratemaking considerations. What NSTAR Electric and its customers may or may not have communicated to each other is not relevant to this case and the burden of searching for the documents is disproportional to the lack of relevance.

Without waiving the Company's objection to this request, the Company notes that its account executives report that most inquiries from customers relative to on-site generation concern interconnection issues after a customer has already installed self generation on its premises.

Information Request NEDGC-2-2

Please explain any and all reasons beyond those stated in NSTAR testimony why NSTAR believes "it is now necessary to revisit the rate design previously adopted by the Department [in the Cambridge/MIT case, D.P.U. 94-101/95-36] in order to establish Standby Rates that will meet the Department's policy goals for Standby Rates for DG customers, and to reflect the newly restructured electric industry in Massachusetts." *LaMontagne Testimony at p. 11, Lines 6-9.*

Response

Mr. LaMontagne's direct testimony (Exhibit NSTAR-HCL-1) fully explains why it is now necessary to revisit the rate design previously adopted by the Department in Cambridge/MIT, D.P.U. 94-101/95-36. In addition to the cited reference identified in the question, it has been nearly a decade since the Department's order in Cambridge/MIT, during which time the electric industry has been extensively restructured. In order to promote fairness to all customers, including customers that may elect to self-generate and the predominant majority of customers for whom such an opportunity is limited, NSTAR Electric believes that this case represents an appropriate and necessary opportunity to establish policy on standby rates. The purpose of NSTAR Electric's proposed standby tariffs is to establish just and reasonable cost-based standby tariffs on a going-forward basis. The justification for the Company's proposal is presented in Mr. LaMontagne's direct testimony and in the responses to information requests submitted throughout this proceeding.

Information Request NEDGC-2-3

Provide complete and detailed documentation for the statement that "in this circumstance, Transmission and Distribution system ("T&D") cost causation is based on how the T&D is actually planned and maintained for customers who self generate. *LaMontagne Testimony* at p. 12-13.

Response

The NSTAR Electric T&D system is planned to meet basic planning criteria that are designed to ensure that adequate capacity is available across the system to serve anticipated customer load under both normal and emergency system conditions. The criteria that NSTAR Electric employs calls for assessing the peak load demand that each new customer will be placing on the system. An assessment is conducted to determine if the existing system can serve this additional demand under peak load conditions. The assessment includes consideration of the system's ability to serve peak demands under normal conditions as well as the ability to serve peak loads with a critical facility out of service. The evaluation considers the capacity requirements at each level in the energy delivery system. This begins with the physical connection at the customer site and involves installation of appropriately sized service entrance wires and possibly the installation of a service transformer. Following this is an assessment of the connection to the primary and back-up feeder circuits for the local distribution facilities. Next is an assessment of the normal and emergency substation load carrying capabilities and finally a determination of the transmission system's ability to serve the expected load addition. Each step in this process compares the load carrying capabilities of the T&D equipment for the specified condition to the peak demands projected to be seen by these facilities with the new customer added to the system. When peak demands exceed the load carrying capabilities of equipment, system upgrades are developed to mitigate such overloads. Determination of the demands placed on each element in the delivery system is established by adding new customer loads to the non-coincident peak loading of the elements under study. The NSTAR Electric criterion also considers unavailability of generation for the conditions studied and NSTAR Electric designs its system to support customer load when the largest generating unit is unavailable. This generally leads to a requirement to supply the full customer peak demand as most customers with generation have only a single generating unit to rely upon.

Consistent with the above-described planning process, NSTAR Electric's proposed standby rates are designed to ensure that the customers for whom facilities have been built to serve their peak load requirements pay for those facilities on a cost basis.

NSTAR Electric
Department of Telecommunications and Energy
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Information Request: **NEDGC-2-3**
March 8, 2004
Person Responsible: Henry C. LaMontagne
Page 2 of 2

Without such cost-based standby rates, cross subsidies would exist and the incorrect economic signal would be sent to customers considering on-site generating options.

Information Request NEDGC-2-5

Please explain how the "cost-causation complication" referred to in Mr. LaMontagne's testimony on page 16 actually relates to cost causation, rather than the potential for under-recovery of costs.

Response

The answer referenced in Exhibit NSTAR-HCL-1, at 16 is in response to a question relating to the design of the standby rate. The design of rates, under Department ratemaking policies, links the recovery of costs to the cause of those costs. The premise of this information request, i.e., that cost recovery and cost causation are unrelated concepts in the context of designing rates, is therefore erroneous. Exhibit NSTAR-HCL-1 refers to the fact that the manner in which rates have been designed for non-standby customers ensures an appropriate link between the level of the monthly billing quantities and cost causation for members of the class of customer. For standby customers, the monthly billing quantities will not provide a reasonable measure for cost causation, generally, because of the infrequent and unscheduled use of delivered energy from the distribution grid. Thus, a different measure must be employed to recognize that the distribution system is built with the capability to serve the standby customer whenever delivery service is needed.

Information Request NEDGC-2-7

Provide complete and detailed documentation supporting the decision to convert distribution rates elements that included an energy component into a fixed demand charge.

Response

Please refer to Exhibit NSTAR-HCL-1 at pages 24–25, Exhibit NSTAR-HCL-2, Exhibit NSTAR-HCL-3, Exhibit NSTAR-HCL-4 and the responses to Information Request DTE-1-12, DTE-3-14 and DTE-4-15.

Information Request NEDGC-2-8

In reference to Mr. LaMontagne's statement on lines 14-15 of page 24, what, if any, other means did Company consider to avoid double collection of distribution revenues, other than converting energy use charges to contract demand based charges for the rates discussed?

Response

The Company has not identified other ways to avoid the double-collection issue while using a rate structure that recognizes both standby load service and supplemental load service.

Information Request NEDGC-2-9

Provide the kWh and kW "billing determinants" that served as the basis for the development of the single demand charges for Rate SB-2 for Boston Edison, as well as for the other rates where such conversion from energy to demand charges were made as described on pages 23 and 24 of Mr. LaMontagne's testimony, including, the number of kWh used to determine the energy based revenue amount shown on Exhibits NSTAR-HCL-2, NSTAR HCL-3 and NSTAR HCL-4.

Response

Please refer to Attachment NEDGC-2-9 pages 1 through 4, which set forth the rate design schedules for Boston Edison Rate G-2, Cambridge Rate G-2 and Commonwealth Rate G-2 and Rate G-3, respectively.

D.T.E. 03-121
Attachment NEDGC-2-9

BOSTON EDISON COMPANY									
ADJUSTED YEAR 1995 BILLING DETERMINANTS									
PRE-RAD RATES REFLECTING 1996 BASE, RATES, CC & FC									
UNBUNDLED RATES FOR EFFECT JANUARY 2003									
PRE-RAD RATE G-2					UNBUNDLED RATE DESIGN RATE G-2				
	UNITS	PRICE	REVENUE			UNITS	PRICE	REVENUE	
CUSTOMER CHARGE	303,168	20.21	6,127,025		CUSTOMER CHARGE	303,168	18.19	5,514,626	
					DISTRIBUTION CHARGE (Demand)				
					WINTER > 10 KVA	3,489,462	9.43	32,905,627	
DEMAND CHARGE					SUMMER > 10 KVA	2,017,299	20.22	40,789,786	
WINTER > 10	3,489,462	11.45	39,954,340		TOTAL	5,506,761		73,695,412	
SUMMER > 10	2,017,299	24.52	49,464,171						
TOTAL	5,506,761		89,418,511		TRANSMISSION CHARGE (Demand)				
					WINTER > 10 KVA	3,489,462	1.89	6,595,083	
					SUMMER > 10 KVA	2,017,299	4.04	8,149,888	
					TOTAL	5,506,761		14,744,971	
ENERGY CHARGE					DISTRIBUTION CHARGE (Energy)				
WINTER -1st 2000 KWH	337,697,570	0.06302	21,281,701		WINTER 1st 2000 kwh	337,697,570	0.01143	3,859,883	
next 150 hrs	645,393,157	0.02757	17,793,489		next 150 h	645,393,157	0.00638	4,117,608	
Additional	548,255,682	0.01445	7,922,295		Additional	548,255,682	0.00451	2,472,633	
TOTAL	1,531,346,409		46,997,485		TOTAL	1,531,346,409		10,450,125	
SUMMER -1st 2000 KW	169,086,564	0.13282	22,458,077		SUMMER 1st 2000 kw	169,086,564	0.02136	3,611,689	
next 150 hrs	360,563,002	0.03975	14,332,379		next 150	360,563,002	0.00811	2,924,166	
Additional	321,971,623	0.01784	5,743,974		Additional	321,971,623	0.00500	1,609,858	
TOTAL	851,621,189		42,534,431		TOTAL	851,621,189		8,145,713	
CONSERVATION CHG	2,382,967,598	0.00381	9,079,107		TRANSMISSION CHARGE (Energy)				
FUEL CHARGE	2,382,967,598	0.04190	99,846,342		WINTER 1st 2000 kwh	337,697,570	0.00369	1,247,357	
					next 150 h	645,393,157	0.00369	2,383,895	
					Additional	548,255,682	0.00000	0	
TOTAL CHARGES			294,002,901		TOTAL	1,531,346,409		3,631,251	
					SUMMER 1st 2000 kw	169,086,564	0.00369	624,557	
					next 150	360,563,002	0.00369	1,331,815	
					Additional	321,971,623	0.00000	0	
					TOTAL	851,621,189		1,956,372	
					TRANSITION CHARGE (Energy)				
					WINTER 1st 2000 kwh	337,697,570	0.03866	13,055,388	
					next 150 h	645,393,157	0.01026	6,621,734	
					Additional	548,255,682	0.00010	54,826	
					TOTAL	1,531,346,409		19,731,947	
					SUMMER 1st 2000 kw	169,086,564	0.09352	15,812,975	
					next 150	360,563,002	0.01893	6,825,458	
					Additional	321,971,623	0.00458	1,474,630	
					TOTAL	851,621,189		24,113,063	
					DSM CHARGE)	2,382,967,598	0.00250	5,957,419	
					RENEWABLES CHARGE	2,382,967,598	0.00050	1,191,484	
					TRANSITION RATE ADJUSTMENT	2,382,967,598	-0.00010	(238,297)	
					DEFAULT SERVICE ADJ CHG	2,382,967,598	0.00000	0	
					GENERATION CHARGE	2,382,967,598	0.04950	117,956,896	
					TOTAL CHARGES			286,850,983	

CAMBRIDGE ELECTRIC LIGHT COMPANY							
ADJUSTED YEAR 1995 BILLING DETERMINANTS							
PRE-RAD RATES REFLECTING 1997 BASE, RATES, CC & FC							
UNBUNDLED RATES FOR EFFECT JANUARY 2003							
PRE-RAD RATE G-2 (1)				UNBUNDLED RATE DESIGN RATE G-2			
	UNITS	PRICE	REVENUE		UNITS	PRICE	REVENUE
CUSTOMER CHARGE				CUSTOMER CHARGE			
SEC	3,120	100.13	312,406	SEC	3,120	90.00	280,800
PRI	60	95.19	5,711	PRI	60	85.55	5,133
TOTAL	3,180		318,117	TOTAL	3,180		285,933
DEMAND CHARGE				DISTRIBUTION CHARGE			
<100 KVA - SEC	283,731	6.72	1,906,672	<100 KVA - SEC	283,731	1.09	309,267
<100 KVA - PRI	5,900	6.39	37,689	<100 KVA - PRI	5,900	0.79	4,661
>100 KVA - SEC	686,462	13.45	9,232,914	>100 KVA - SEC	686,462	2.06	1,414,112
>100 KVA - PRI	9,251	12.79	118,279	>100 KVA - PRI	9,251	1.46	13,506
TOTAL	985,344		11,295,555	TOTAL	985,344		1,741,546
ENERGY CHARGE				TRANSMISSION CHARGE			
PEAK - SEC	104,059,575	0.02931	3,049,986	<100 KVA - SEC	283,731	4.50	1,276,790
PEAK - PRI	1,237,495	0.02786	34,479	<100 KVA - PRI	5,900	4.50	26,550
LOW A - SEC	97,858,363	0.02279	2,230,192	>100 KVA - SEC	686,462	9.37	6,432,149
LOW A - PRI	1,118,111	0.02166	24,223	>100 KVA - PRI	9,251	9.37	86,682
LOW B - SEC	172,518,038	0.01698	2,912,104	TOTAL	985,344		7,822,170
LOW B - PRI	2,174,244	0.01605	34,888				
TOTAL	378,965,826		8,285,873	TRANSITION CHARGE (Demand)			
CONSERVATION CHG	378,965,826	0.00017	64,424	<100 KVA - SEC	283,731	0.77	218,473
FUEL CHARGE	378,965,826	0.03490	13,225,907	<100 KVA - PRI	5,900	0.77	4,543
TOTAL CHARGES			33,189,876	>100 KVA - SEC	686,462	0.77	528,576
				>100 KVA - PRI	9,251	0.77	7,123
				TOTAL	985,344		758,715
				DISTRIBUTION CHARGE (Energy)			
				PEAK - SEC	104,059,575	0.00493	513,014
				PEAK - PRI	1,237,495	0.00378	4,678
				LOW A - SEC	97,858,363	0.00493	482,442
				LOW A - PRI	1,118,111	0.00378	4,226
				LOW B - SEC	172,518,038	0.00493	850,514
				LOW B - PRI	2,174,244	0.00378	8,219
				TOTAL	378,965,826		1,863,092
				TRANSITION CHARGE (Energy)			
				PEAK - SEC	104,059,575	0.00123	127,993
				PEAK - PRI	1,237,495	0.00123	1,522
				LOW A - SEC	97,858,363	0.00000	0
				LOW A - PRI	1,118,111	0.00000	0
				LOW B - SEC	172,518,038	-0.00074	(127,663)
				LOW B - PRI	2,174,244	-0.00074	(1,609)
				TOTAL	378,965,826		243
				TRANSITION RATE ADJUSTMENT			
				SEC	374,435,976	0.00074	277,083
				PRI	4,529,850	0.00074	3,352
				TOTAL	378,965,826		280,435
				DSM CHARGE			
				SEC	374,435,976	0.00250	936,090
				PRI	4,529,850	0.00250	11,325
				TOTAL	378,965,826		947,415
				RENEWABLES CHARGE			
				SEC	374,435,976	0.00050	187,218
				PRI	4,529,850	0.00050	2,265
				TOTAL	378,965,826		189,483
				DEFAULT SERVICE ADJUSTMENT			
				PEAK - SEC	104,059,575	0.00160	166,495
				PEAK - PRI	1,237,495	0.00160	1,980
				LOW A - SEC	97,858,363	0.00160	156,573
				LOW A - PRI	1,118,111	0.00160	1,789
				LOW B - SEC	172,518,038	0.00160	276,029
				LOW B - PRI	2,174,244	0.00160	3,479
				TOTAL	378,965,826		606,345
				GENERATION CHARGE			
				PEAK - SEC	374,435,976	0.04700	17,598,491
				PEAK - PRI	4,529,850	0.04606	208,645
				TOTAL	378,965,826		17,807,136
				TOTAL CHARGES			32,392,512

COMMONWEALTH ELECTRIC									
ADJUSTED YEAR 1995 BILLING DETERMINANTS									
PRE-RAD RATES REFLECTING 1997 BASE RATES, CC & FC									
UNBUNDLED RATES FOR EFFECT JANUARY 2003									
PRE-RAD RATE G-2 Includes Rate G-8					UNBUNDLED RATE DESIGN RATE G-2				
		UNITS	PRICE	REVENUE			UNITS	PRICE	REVENUE
CUSTOMER CHARGE					CUSTOMER CHARGE				
	SEC	4,189	400.14	1,676,186		SEC	4,189	360.13	1,508,585
	PRI(M)	192	380.38	73,033		PRI(M)	192	342.34	65,729
	PRI(S)	12	388.14	4,658		PRI(S)	12	349.33	4,192
	TOTAL	4,393		1,753,877		TOTAL	4,393		1,578,506
DEMAND CHARGE					DISTRIBUTION CHARGE (DEMAND)				
	PEAK - SEC	1,141,331	3.11	3,549,539		PEAK - SEC	1,141,331	1.53	1,746,236
	PEAK - PRI(M)	51,845	2.96	153,273		PEAK - PRI(M)	51,845	1.45	75,404
	PEAK - PRI(S)	4,381	3.02	13,216		PEAK - PRI(S)	4,381	1.48	6,502
	TOTAL	1,197,557		3,716,028		TOTAL	1,197,557		1,828,143
ENERGY CHARGE					TRANSITION CHARGE				
	PEAK - SEC	112,706,347	0.02728	3,074,629		SEC	415,141,185	0.02749	11,412,231
	PEAK - PRI(M)	4,825,201	0.02593	125,129		PRI(M)	19,027,260	0.02749	523,059
	PEAK - PRI(S)	528,340	0.02646	13,981		PRI(S)	1,787,760	0.02749	49,146
	LOW A - SEC	111,405,762	0.02413	2,688,221		TOTAL	435,956,205		11,984,436
	LOW A - PRI(M)	4,949,555	0.02294	113,533		TRANSMISSION CHARGE (DEMAND)			
	LOW A - PRI(S)	464,426	0.02341	10,870		PEAK - SEC	1,141,331	1.52	1,734,823
	LOW B - SEC	191,029,076	0.01827	3,490,101		PEAK - PRI(M)	51,845	1.44	74,911
	LOW B - PRI(M)	9,252,504	0.01737	160,693		PEAK - PRI(S)	4,381	1.47	6,459
	LOW B - PRI(S)	794,994	0.01772	14,089		TOTAL	1,197,557		1,816,194
					TRANSMISSION CHARGE (ENERGY)				
						PEAK - SEC	415,141,185	0.00083	346,528
						PEAK - PRI(M)	19,027,260	0.00079	15,098
						PEAK - PRI(S)	1,787,760	0.00081	1,448
						TOTAL	435,956,205		363,073
	TOTAL	435,956,205		9,691,246					
					DISTRIBUTION CHARGE (ENERGY)				
CONSERVATION CHG		435,956,205	0.00247	1,076,812		PEAK - SEC	112,706,347	0.01403	1,581,270
						PEAK - PRI(M)	4,825,201	0.01132	54,621
FUEL CHARGE		435,956,205	0.06500	28,310,094		PEAK - PRI(S)	528,340	0.01244	6,573
						LOW A - SEC	111,405,762	0.01120	1,247,745
TOTAL CHARGES				44,548,057		LOW A - PRI(M)	4,949,555	0.00863	42,715
						LOW A - PRI(S)	464,426	0.00968	4,496
						LOW B - SEC	191,029,076	0.00593	1,132,802
						LOW B - PRI(M)	9,252,504	0.00361	33,402
						LOW B - PRI(S)	794,994	0.00457	3,633
						TOTAL	435,956,205		4,107,256
					TRANSITION RATE ADJ				
						SEC	415,141,185	-0.00028	(116,240)
						PRI(M)	19,027,260	-0.00028	(5,328)
						PRI(S)	1,787,760	-0.00028	(501)
						TOTAL	435,956,205		(122,068)
					DSM CHARGE				
						SEC	415,141,185	0.00250	1,037,853
						PRI(M)	19,027,260	0.00250	47,568
						PRI(S)	1,787,760	0.00250	4,469
						TOTAL	435,956,205		1,089,891
					RENEWABLES CHARGE				
						SEC	415,141,185	0.00050	207,571
						PRI(M)	19,027,260	0.00050	9,514
						PRI(S)	1,787,760	0.00050	894
						TOTAL	435,956,205		217,978
					GENERATION CHARGE				
						SEC	415,141,185	0.04700	19,511,636
						PRI(M)	19,027,260	0.04606	876,396
						PRI(S)	1,787,760	0.04700	84,025
						TOTAL	435,956,205		20,472,056
Comet_Model_03.xls									
					TOTAL CHARGES				
									43,335,464
11/30/2002									

COMMONWEALTH ELECTRIC							
ADJUSTED YEAR 1995 BILLING DETERMINANTS							
PRE-RAD RATES REFLECTING 1997 BASE RATES, CC & FC							
UNBUNDLED RATES FOR EFFECT JANUARY 2003							
PRE-RAD RATE G-3 Includes Rates G-3(ED), Rider, SXD, Incr.				UNBUNDLED RATE DESIGN RATE G-3			
	UNITS	PRICE	REVENUE		UNITS	PRICE	REVENUE
CUSTOMER CHARGE				CUSTOMER CHARGE			
SEC	363	1,000.14	363,051	SEC	363	900.00	326,700
PRI	301	950.74	286,173	PRI	301	855.54	257,518
TOTAL	664		649,224	TOTAL	664		584,218
DEMAND CHARGE				DISTRIBUTION CHARGE (DEMAND)			
PEAK - SEC	281,095	5.44	1,529,157	PEAK - SEC	281,095	0.88	247,364
PEAK - PRI	616,111	5.17	3,186,073	PEAK - PRI	616,111	0.64	394,311
TOTAL	897,206		4,715,229	TOTAL	897,206		641,675
ENERGY CHARGE				TRANSITION CHARGE (DEMAND)			
PEAK - SEC	32,067,127	0.01683	539,690	PEAK - SEC	281,095	2.41	677,439
PEAK - PRI	68,295,640	0.01600	1,092,634	PEAK - PRI	616,111	2.41	1,484,828
LOW A - SEC	32,691,823	0.01368	447,224	TOTAL	897,206		2,162,266
LOW A - PRI	69,053,712	0.01300	897,989	TRANSITION CHARGE			
LOW B - SEC	49,688,387	0.00781	388,066	PEAK - SEC	32,067,127	0.02428	778,590
LOW B - PRI	131,231,567	0.00742	974,288	PEAK - PRI	68,295,640	0.02428	1,658,218
TOTAL	383,028,256		4,339,891	LOW A - SEC	32,691,823	0.02231	729,355
CONSERVATION CHG	383,028,256	0.00247	946,080	LOW A - PRI	69,053,712	0.02231	1,540,588
FUEL CHARGE	383,028,256	0.06500	24,547,681	LOW B - SEC	49,688,387	0.02024	1,005,693
TOTAL CHARGES			35,198,106	LOW B - PRI	131,231,567	0.02024	2,656,127
				TOTAL	383,028,256		8,368,571
				TRANSMISSION CHARGE (DEMAND)			
				PEAK - SEC	281,095	1.92	539,702
				PEAK - PRI	616,111	1.92	1,182,933
				TOTAL	897,206		1,722,636
				TRANSMISSION CHARGE (ENERGY)			
				SEC	114,447,337	0.00000	0
				PRI	268,580,919	0.00000	0
				TOTAL	383,028,256		0
				DISTRIBUTION CHARGE (ENERGY)			
				PEAK - SEC	32,067,127	0.00871	279,305
				PEAK - PRI	68,295,640	0.00635	433,677
				LOW A - SEC	32,691,823	0.00771	252,054
				LOW A - PRI	69,053,712	0.00549	379,105
				LOW B - SEC	49,688,387	0.00417	207,201
				LOW B - PRI	131,231,567	0.00221	290,022
				TOTAL	383,028,256		1,841,363
				DSM CHARGE			
				SEC	114,447,337	0.00250	286,118
				PRI	268,580,919	0.00250	671,452
				TOTAL	383,028,256		957,571
				RENEWABLES CHARGE			
				SEC	114,447,337	0.00050	57,224
				PRI	268,580,919	0.00050	134,290
				TOTAL	383,028,256		191,514
				TRANSITION RATE ADJ			
				SEC	114,447,337	-0.00106	(121,314)
				PRI	268,580,919	-0.00106	(284,696)
				TOTAL	383,028,256		(406,010)
				GENERATION CHARGE			
				SEC	114,447,337	0.04700	5,379,025
				PRI	268,580,919	0.04606	12,370,837
				TOTAL	383,028,256	0.00000	17,749,862
				TOTAL CHARGES			
							33,813,665
Comet_Model_03.xls							11/30/2002

Information Request NEDGC-2-10

For each of the Applicable Rate Schedules during the period 2000-2003; provide number of customers in each class whose monthly maximum demand as measured in kW varied between their lowest month and highest month by more than (1) 25%, (2) 50% or (3) 75% or (4) 100%. For example, if a customer's lowest monthly maximum demand was 100 kW in April, and their highest demand monthly maximum was 185 kW in August, then they would be listed under group 3.

Response

The Company does not produce a report containing the information requested in the normal course of business. In order to provide a response, the Company would need to perform an extensive analysis of Company load data, which would require substantial additional time. The Company will endeavor to develop this analysis in response to the request and, if such an analysis can be reasonably performed, will submit a supplemental response when the information and analysis is completed.

Information Request NEDGC-2-11

Please provide complete and detailed information supporting the statement that "Because the Company would not plan for or build distribution and transmission facilities to serve interruptible customers, the customer would be billed a customer charge only and then billed on as "as-used" basis under the otherwise applicable tariff for any service actually taken." *LaMontagne Testimony* at 26, lines 21-24.

Response

As explained in the testimony, the Company generally does not plan for or build distribution and transmission facilities for interruptible customers (except perhaps for special metering equipment that the customer pays for directly to serve its interruptible customers). Therefore, the Company imposes only a monthly customer charge to reflect the cost of the electric meter and service drop, their installation, monthly meter reading and the issuance of a monthly bill. The Company proposes to bill such interruptible customers on an "as-used" basis under the otherwise applicable tariff rather than on the basis of a contract demand amount because the Company has not made a commitment to the customer to provide firm service (*i.e.*, to make the necessary monetary investment in distribution facilities that would permit the customer to receive firm service). Rather, non-firm service would be provided to standby customers only when there is available capacity on the Company's distribution system.

Information Request NEDGC-2-12

In reference to the quote in the prior question NEDGC 2-11, please explain how NSTAR decided that a customer who seeks "interruptible" service and causes the Company to incur no costs should be nonetheless charged the exact same rates as an all requirements customer?

Response

Interruptible customers are "opportunity customers" because they provide the Company and its firm customers with an opportunity to obtain a financial contribution towards the fixed costs that are needed to serve the Company's firm customers. See New England Energy Group, D.P.U. 85-178, at 38 (1987). The Company proposes to charge the same rate to interruptible customers (on an "as-used" basis) as an all-requirements customer in order to provide contribution from such customers toward the reduction of fixed costs needed to serve the Company's firm customers. It should be noted, however, that a standby interruptible customer that has on-site generation will be paying far less than a similar customer without on-site generation, since the rates are charged only when the generation is not serving the customer's load.

Information Request NEDGC-2-13

Please provide copies of all applicable tariffs, rates, agreements, or contracts under the terms of which the Company currently provides, or in the past five years, provided so-called interruptible service.

Response

Please see response to Information Request AG-1-14. In addition, please see Attachments NEDGC-2-13(a) and (b) for the Interruptible Rate I-1 for Cambridge and Commonwealth, respectively. These rates were terminated as of January 1, 2001.

D.T.E. 03-121
Attachment NEDGC-2-13 (a)

LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

AVAILABILITY

This rate is available to any Customer (1) who was taking service under the Company's Interruptible Rate I-1 on February 28, 1998 and, (2) who is taking Standard Offer Service from the Company and, (3) who is willing to make available for interruption a load of at least 100 kilovolt-amperes (the "Interruptible Load") in accordance with the terms of this rate. Electricity delivered by the Company, including service to the Customer's Interruptible Load, shall be billed under Rate G-2 or Rate G-3, subject to the Interruptible Credit provisions of this rate as applied to the Interruptible Load. This rate is available to Customers until January 1, 2001 whereupon it will terminate. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, including, without limitation, generally applicable provisions concerning interruption, curtailment or alteration of service, each as in effect from time to time.

INTERRUPTIBLE SERVICE CATEGORIES

The Customer may elect either of the interruptible service categories set forth below. The minimum interruptible load requirement of 100 Kva shall apply separately to each service category.

Category 1:

Category 1 interruptible loads are loads which the Company may interrupt at its sole discretion at any time upon 30 minutes notice to the Customer but which do not qualify as Category 2 interruptible loads. No single interruption shall exceed 8 hours in duration, nor shall there be more than one interruption on any single calendar day. The Customer may elect one or more of the following options:

<u>Option</u>	<u>Maximum Number of Interruptions Per Year</u>	<u>Maximum Cumulative Interruptible Hours Per Year</u>
A	60	360
B	40	240
C	20	120

Issued by: Thomas J. May
President

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Effective: March 1, 2003

LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

INTERRUPTIBLE SERVICE CATEGORIES (continued)

Category 2:

Category 2 interruptible loads must qualify as NEPOOL Dispatchable Type 2 or Type 3 Loads as defined in NEPOOL Criteria, Rules and Standards No. 16 ("CRS #16") or in such replacement therefor as may be adopted by NEPOOL from time to time. Customers electing service under Category 2 shall be subject to all the terms and conditions of NEPOOL CRS #16, including operational characteristics and metering or telemetering requirements, as appropriate under the available options outlined in NEPOOL CRS #16.

DETERMINATION OF CIL

During the course of a Month, the Company may notify the Customer to interrupt the NIL. At the end of such Month, the Company will analyze the Interruptible Periods which occurred during the Month, if any.

- A. For any Interruptible Period which included the hour in which the Company's Adjusted Monthly Peak occurred, the CIL will be calculated based upon the AIL.
- B. For any Interruptible Period which did not include the Company's Adjusted Monthly Peak, the CIL will be calculated using the lesser of the AIL or the NIL.
- C. In the event that there were no Interruptible Periods during the Month, the CIL for that Month shall be equal to the lesser of: (i) the average of the CILs during the prior three Months or (ii) 84% of the NIL.
- D. In the event that there was more than one Interruptible Period during the same Month, the CIL for the Month shall be equal to the average of the CILs applicable to the Interruptible Periods during such Month.

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

DETERMINATION OF CIL (continued)

The Company shall require the Customer to interrupt the NIL at least once during each Capability Period, unless the Customer has been required by the Company to interrupt load pursuant to the provisions of this Rate I-1 at another time during the same Capability Period.

INTERRUPTIBLE CREDIT PER MONTH

The sum of the Customer's Distribution and Transmission Demand Charge per month under Rate G-2 or Rate G-3 shall be subject to an interruptible credit determined by multiplying the CIL by the applicable credit per Kva set forth below:

Credit:	Category 1	<u>Rate G-2</u>	<u>Rate G-3</u>
	Option A	\$6.94 per Kva	\$7.62 per Kva
	Option B	\$4.63 per Kva	\$5.08 per Kva
	Option C	\$2.31 per Kva	\$2.54 per Kva
	Category 2	\$6.94 per Kva	\$7.62 per Kva

FAILURE TO INTERRUPT

If at any time a Customer taking Category 1 interruptible service hereunder fails to interrupt an amount of load equal to at least 70% of the NIL within 30 minutes of being required to do so by the Company or fails to maintain such load interrupted during the Interruptible Period, the following penalties shall be applied:

- A. The NIL will be reduced to the AIL for a period of 12 Months.
- B. A charge will be added to the Customer's bill for the following Month equal to the difference between 0.70 times the NIL and the AIL multiplied by the applicable Credit per Kva as calculated above times the number of Months, to a maximum of 6, since the last change in the level of the NIL.

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

FAILURE TO INTERRUPT (continued)

- C. The Company may terminate the service agreement at its sole discretion.

Any penalties incurred by the Company occasioned by the failure of the Customer to perform under the terms of this rate will be borne in full by the Customer. Any interference by the Customer with the normal operation of the Company's disconnection devices shall be deemed to be a failure to interrupt and shall cause the Customer to incur the above-stated penalties.

SPECIAL PROVISIONS

- A. Where the Customer has provided for the separate wiring and metering of the Interruptible Load, such wiring shall preclude any use of the Company's firm service as an alternate source of supply to the Interruptible Load. The Customer may not, under any circumstances, use the Company's firm service as an alternate source of supply to the Interruptible Load during interruptions of supply hereunder.
- B. Upon written request of the Company, the Customer shall install, maintain and bear the cost of such telemetering equipment and data circuits as the Company may reasonably require for the transmission of various metered values to its operations center. The design of and equipment specifications for such telemetering equipment and data circuits shall be approved by the Company prior to installation thereof by the Customer.
- C. Upon written request of the Company, the Customer shall provide at its own expense a circuit breaker capable of disconnecting the Interruptible Load served hereunder through remote control devices installed and controlled by the Company. The Company will furnish and the Customer shall install the equipment to provide remote control of the circuit breaker at a location approved by the Company. The Customer shall furnish and install the electrical facilities required to connect the control equipment and shall supply the electric power necessary for its operation. Until such time as the Company's remote control system is installed, the Customer will be responsible for disconnecting the Interruptible Load at the Company's request.

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President

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Effective: March 1, 2003

LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

SPECIAL PROVISIONS (continued)

- D. Upon written request of the Company, the Customer shall provide a telephone module, dedicated solely to the purpose of communicating with the Company, with both audible and visual alarms to ensure prompt and effective response to the notification by the Company. Telephone calls to and from the Company's System Control Center will be recorded.

DEFINITIONS

- A. **Interruptible Load.** The Interruptible Load shall be the amount of load that a Customer electing service under the provisions of this rate offers for interruption.
- B. **Actual Interruptible Load ("AIL").** The AIL shall be defined as either of the following, as appropriate:
1. The difference between the peak 15 minute integrated demand established by the Customer during the peak period of the Month, as defined in Rate G-2 or G-3, measured in Kva, on the Company's meter(s) recording only the Interruptible Load (if such load is metered separately from any other electric service supplied to the Customer) and the Customer's peak 15 minute integrated demand as measured during the Interruptible Period; or
 2. The difference between the peak 15 minute integrated demand established by the Customer during the peak period of the Month, as defined in Rate G-2 or Rate G-3, measured in Kva, on the Company's meter(s) recording all electric service supplied to the Customer and the Customer's peak 15 minute integrated demand as measured during the Interruptible Period.
- C. **Adjusted Monthly Peak.** The Adjusted Monthly Peak shall be defined as set forth in Section 15.3 of the NEPOOL Agreement from time to time.
- D. **Capability Period.** A Capability Period shall be defined as set forth in Section 15.7 of the NEPOOL Agreement from time to time.

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President

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

DEFINITIONS (continued)

- E. **Credited Interruptible Load ("CIL")**. The CIL shall be equal to 84% of either the AIL or the NIL, as appropriate.
- F. **Interruptible Period**. An Interruptible Period shall begin when the Customer is given notice by the Company to interrupt the NIL and shall end when the Company notifies the Customer that the period of interruption is over.
- G. **Month**. The word Month as used in this Rate I-1 shall have the meaning set forth in the Company's Terms and Conditions from time to time.
- H. **NEPOOL**. The New England Power Pool as established by the NEPOOL Agreement dated September 1, 1971, as amended.
- I. **Nominated Interruptible Load ("NIL")**. The NIL shall be the amount of load in Kva which the Customer agrees to interrupt within the time period required by Category 1 or Category 2, as appropriate, but not less than 100 Kva.

TERM

This rate shall terminate on December 31, 2000.

*Filed Pursuant to Order of the
Massachusetts Department of Telecommunications and Energy
Issued February 27, 1998 in D.P.U./D.T.E. 97-111*

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President

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Effective: March 1, 2003

D.T.E. 03-121
Attachment NEDGC-2-13 (b)

LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

AVAILABILITY

This rate is available to any Customer (1) who was taking service under the Company's Interruptible Rate I-1 on February 28, 1998 and, (2) who is taking Standard Offer Service from the Company and, (3) who is willing to make available for interruption a load of at least 100 kilovolt-amperes (the "Interruptible Load") in accordance with the terms of this rate. Electricity delivered by the Company, including service to the Customer's Interruptible Load, shall be billed under Rate G-2 or Rate G-3, subject to the Interruptible Credit provisions of this rate as applied to the Interruptible Load. This rate is available to Customers until January 1, 2001 whereupon it will terminate. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, including, without limitation, generally applicable provisions concerning interruption, curtailment or alteration of service, each as in effect from time to time.

INTERRUPTION OF SERVICE

The Customer may elect to take service under either of the interruptible service categories set forth below. The minimum Interruptible Load requirement of 100 kilovolt-amperes ("KVA") shall apply separately to each such service category.

TYPE 1:

Type 1 Interruptible Loads are loads which the Company may interrupt at its sole discretion at any time upon 30 minutes notice to the Customer but which do not qualify as Company Type 2 Interruptible Loads. No single such interruption shall exceed 8 hours in duration, nor shall there be more than one interruption on any single calendar day. The Customer may elect one or more of the following options:

<u>Option</u>	<u>Maximum Number of Interruptions Per Year</u>	<u>Maximum Cumulative Interruptible Hours Per Year</u>
A	60	360
B	40	240
C	20	120

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President

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

INTERRUPTION OF SERVICE (continued)

TYPE 2:

Type 2 Interruptible Loads must qualify as NEPOOL Dispatchable Type 2 or Type 3 Loads as defined in NEPOOL Criteria, Rules and Standards No. 16 ("CRS #16") or in such replacement therefor as may be adopted by NEPOOL from time to time. "NEPOOL" means the New England Power Pool as established by the NEPOOL Agreement dated September 1, 1971, as amended.

Customers electing to take service as Company Type 2 Interruptible Loads shall be subject to all the terms and conditions of NEPOOL CRS #16, including operational characteristics and metering or telemetering requirements, as appropriate under the available options outlined therein.

INTERRUPTIBLE CREDIT PER MONTH

The sum of the Customer's Distribution and Transmission Demand Charge per Month under Rate G-2 or Rate G-3 shall be subject to an Interruptible Credit determined by multiplying the Customer's CIL by the product of the applicable Monthly Demand Credit per Month multiplied times the Maximum Credit Factor per Month, both as set forth below:

Demand Credit:	Type 1	<u>Rate G-2</u>	<u>Rate G-3</u>
	Option A	\$7.80 per KVA	\$7.80 per KVA
	Option B	\$5.20 per KVA	\$5.20 per KVA
	Option C	\$2.60 per KVA	\$2.60 per KVA
	Type 2	\$7.80 per KVA	\$7.80 per KVA

Maximum Credit Factor:

The Maximum Credit Factor per Month shall be the lesser of 1.0 or 2.1268 multiplied by the Customer's Load Factor per Month. The Customer's Load Factor per Month shall be

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President

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

INTERRUPTIBLE CREDIT PER MONTH (continued)

calculated by dividing the total KWH in the Month by the product of the maximum 15 minute demand in KVA during the peak load period multiplied times the total hours in the Month.

- A. The Nominated Interruptible Load ("NIL") shall be equal to the amount of load, in KVA, which the Customer agrees to interrupt within the time period required by the Type 1 and Type 2 service categories, as appropriate, after receiving notice to do so from the Company, but not less than 100 KVA.
- B. The Actual Interruptible Load ("AIL") shall be defined as either of the following, as appropriate to the Customer's circumstances.
1. The difference between the peak 15 minute integrated demand established by the Customer during the peak period of the Month, as defined in Rate G-2 or G-3, measured in KVA, on the Company's meter(s) recording only the Interruptible Load (if such load is metered separately from any other electric service supplied to the Customer) and the Customer's peak 15 minute integrated demand as measured during the Interruptible Period; or
 2. The difference between the peak 15 minute integrated demand established by the Customer during the peak period of the Month, as defined in Rate G-2 or Rate G-3, measured in KVA, on the Company's meter(s) recording all electric service supplied to the Customer and the Customer's peak 15 minute integrated demand as measured during the Interruptible Period.
- C. The Credited Interruptible Load ("CIL") shall be equal to a factor of 0.80 multiplied by either the AIL or the NIL as appropriate.

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

INTERRUPTIBLE PERIOD

An Interruptible Period shall begin when the Customer is required by the Company to interrupt the NIL and shall end when the Company notifies the Customer that the period of interruption is over.

BASIS FOR INTERRUPTIBLE CREDIT

During the course of a Month, the Company may notify the Customer to interrupt the NIL. At the end of such Month, the Company will analyze the Interruptible Period(s) which occurred during the Month, if any.

- A. For any Interruptible Period which included the hour in which the Company's Adjusted Monthly Peak occurred (as defined at Section 15.3 of the NEPOOL Agreement), the Interruptible Credit will be applied based upon the CIL calculated using the AIL.
- B. For any Interruptible Period which did not include the Company's Adjusted Monthly Peak, the Interruptible Credit will be applied based upon the CIL calculated using the lesser of the AIL or the NIL.
- C. In the event that the Customer was not required to interrupt load during the Month, the Interruptible Credit for that Month shall be based upon the lesser of the average CIL during the prior three Months or 0.80 times the NIL. When more than one interruption has been requested by the Company during the same Month, the CIL shall be averaged for the Month.

The Company shall require the Customer to interrupt its NIL at least once during each Capability Period (as defined at Section 15.7 of the NEPOOL Agreement), unless the Customer has been required by the Company to interrupt load pursuant to the provisions of this rate at another time during the same Capability Period.

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

FAILURE TO INTERRUPT

If at any time a Type 1 interruptible Customer fails to interrupt an amount of load at least equal to 0.70 times the NIL within 30 minutes of being required to do so by the Company or fails to maintain such load interrupted during the Interruptible Period, the following penalties shall be applied:

- A. The NIL will be reduced to the AIL for a period of 12 Months.
- B. A charge will be added to the Customer's bill for the following Month equal to the difference between 0.70 times the NIL and the AIL multiplied by the Credit Amount times the lesser of 6 or the number of Months since the last change in the level of the NIL.
- C. The Company may terminate the service agreement at its sole discretion.

Any penalties incurred by the Company occasioned by the failure of the Customer to perform under the terms of this rate will be borne in full by the Customer. Any interference by the Customer with the normal operation of the Company's disconnection devices shall be deemed to be a failure to interrupt and shall cause the Customer to incur the above-stated penalties.

SPECIAL PROVISIONS

- A. Where the Customer has provided for the separate wiring and metering of the Interruptible Load, such wiring shall preclude any use of the Company's firm service as an alternate source of supply to the Interruptible Load. The Customer may not, under any circumstances, use the Company's firm service as an alternate source of supply to the Interruptible Load during interruptions of supply hereunder.
- B. Upon written request of the Company, the Customer shall install, maintain and bear the cost of such telemetering equipment and data circuits as the Company may reasonably require for the transmission of various metered values to its operations center. The design of and equipment specifications for such telemetering equipment and data circuits shall be approved by the Company prior to installation thereof by the Customer.

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President

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LARGE GENERAL INTERRUPTIBLE SERVICE

RATE I-1

SPECIAL PROVISIONS (continued)

- C. Upon written request of the Company, the Customer shall provide at its own expense a circuit breaker capable of disconnecting the Interruptible Load served hereunder through remote control devices installed and controlled by the Company. The Company will furnish and the Customer shall install the equipment to provide remote control of the circuit breaker at a location approved by the Company. The Customer shall furnish and install the electrical facilities required to connect the control equipment and shall supply the electric power necessary for its operation. Until such time as the Company's remote control system is installed, the Customer will be responsible for disconnecting the Interruptible Load at the Company's request.
- D. Upon written request of the Company, the Customer shall provide a telephone module, dedicated solely to the purpose of communicating with the Company, with both audible and visual alarms to ensure prompt and effective response to the notification by the Company. Telephone calls to and from the Company's System Control Center will be recorded.

TERM

The rate shall terminate on December 31, 2000.

*Filed Pursuant to Order of the
Massachusetts Department of Telecommunications and Energy
Issued February 27, 1998 in D.P.U./D.T.E. 97-111*

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Information Request NEDGC-2-14

Provide complete and detailed documentation regarding the level of reserve distribution capacity – e.g. distribution capacity over and above projected system peak load -- that is typically incorporated into the distribution system planning process for each distribution voltage level, including substation, primary and secondary distribution.

Response

See the response to Information Request AG-1-10. Attachment AG-1-10, Attachment A, is the annual filing titled "NSTAR 2003 Transmission and Distribution Operating Study."

Information Request NEDGC-2-16

Provide complete and detailed documentation showing how the Company recovers costs incurred from firm all-requirements customers who reduce their electricity consumption as a result of installing equipment or instituting other energy conservation measures.

Response

Pursuant to the Restructuring Act, the cost of energy efficiency measures is collected annually through a fixed energy efficiency charge established by statute. See G.L. c. 25, § 19. The charge is uniform to all customers and is consistent with specific energy efficiency programs and budgets approved by the Department and the Division of Energy Resources.

However, there are several important distinguishing features that make the recovery of energy efficiency costs different from self-generation situations. First, unlike self-generation, energy efficiency measures generally do not displace a customer's total (or the vast majority of) load. Second, once installed, the energy efficiency measures, if properly maintained, would not result in the instantaneous resumption of the customer's former load on the distribution system, as would be the case if there were an outage of a customer's generator. Third, as a policy matter, essentially all customers have the option of participating in energy efficiency initiatives in some manner while, as a practical matter, self-generation is an option to only a relatively small minority of customers. Moreover, unlike in self-generation contexts, there is diversity among customers that pursue energy efficiency initiatives, with many customers participating and those customers being connected on the same distribution circuits. These distinguishing characteristics call for a different ratemaking approach to ensure that cost recovery mechanisms are in place and that cost shifting and cross subsidies are avoided. It also bears repeating here that the proposed standby rates are cost-based rates for services that a customer voluntarily requests the Company to provide and that the costs recovered through the proposed rates may be avoided if the customer does not desire firm, back-up service from the Company.

Please also see the response to Information Request NEDGC-2-17.

Information Request NEDGC-2-17

Provide complete and detailed documentation showing how the Company recovers costs from firm all-requirements customers who reduce their electricity consumption due to any circumstances other than those listed in the prior question NEDGC 2-17 [sic].

Response

During a base rate proceeding, base rates are set to ensure the recovery of the established revenue requirement, as determined by the Department. Between such base rate proceedings, there are various changes that occur relating to, among other things, cost incurrence, changes in the number of customers and changes in usage patterns that can affect cost recovery. For example, in a situation where a customer reduces its need for electricity from the Company because of a customer electing to discontinue its operations and to leave the service territory, ongoing cost recovery from that customer may not be available. Such circumstances are often part of the normal ebb and flow of customers. However, this type of ebb and flow is completely different from the self-generation context where a customer remains connected to the distribution system, the distribution company maintains an obligation to serve and, on an instantaneous basis, the distribution company must meet the full requirements of the self-generating customer when loads are imposed on the electric system.

Please also see the response to Information Request NEDGC 2-16.

Information Request NEDGC-2-18

Provide, for each Company, the monthly number of customers for each Applicable Rate Schedule for the years 1998-2003.

Response

Please see responses to Information Requests DTE-2-11, DTE-3-7 and DTE-4-8.

Information Request NEDGC-2-19

Provide, for each Company, the monthly number of customers for each Proposed Rate for the years 1998-2003.

Response

There are no customers served under the proposed rates. However, the Company has provided the number of customers receiving service under the otherwise applicable rate schedules. See response to Information Requests DTE-2-11, DTE-3-7 and DTE-4-8.

Information Request NEDGC-2-20

Provide, for each Company, the total (line and iron) peak losses as a percent of peak for the years 1993-2003 for each of the following:

- (a) transmission lines
- (b) distribution substations
- (c) primary distribution lines
- (d) secondary distribution lines.

Response

Please refer to Attachment NEDGC-2-20. The attachment sets forth the most recent loss studies conducted by the Companies. The Companies do not routinely conduct voltage level loss studies for each year.

Boston Edison Company
Peak load Losses as percentage of Peak Load
Based Upon Year 1992 Study

	Total Peak Load Losses MW	Total Peak Load MW	% of Peak Load
Transmission lines		2545.00	2.0000%
High Tension lines		2545.00	4.8800%
Primary Distribution Lines		2545.00	6.4300%
Secondary Distribution Lines		2545.00	9.8100%

Commonwealth Electric Company
Peak load Losses as percentage of Peak Load
Based Upon Year 1995 Study

	Total Peak Load Losses MW	Total Peak Load MW	% of Peak Load
Transmission lines	11.32	697.10	1.6239%
Primary Distribution Lines	17.60	697.10	2.5247%
Substations @ Secondary Level	10.56	697.10	1.5148%
Secondary Distribution Lines	17.08	697.10	2.4502%

Cambridge Electric Light Company
Peak load Losses as percentage of Peak Load
Based Upon Year 1995 Study

	Total Peak Load Losses MW	Total Peak Load MW	% of Peak Load
Transmission lines	1.04	288.80	0.3601%
Primary Distribution Lines	3.49	288.80	1.2084%
Substations @ Secondary Level	1.08	288.80	0.3740%
Secondary Distribution Lines	1.44	288.80	0.4986%
	7.05		

Information Request NEDGC-2-21

Provide, for each Applicable Rate Schedule, all marginal cost studies relating to the Applicable Rate Schedule submitted to the Department by the Company, dating back to and including the Last General Rate Case.

Response

Please see the responses to Information Requests DTE-2-23, DTE-3-18 and DTE-4-19 for the marginal cost studies of Boston Edison, Commonwealth Electric and Cambridge Electric Light Company, respectively.

Information Request NEDGC-2-22

Provide for each Applicable Rate Schedule, the Company's best estimate of the number of hours during the year in which the peak demand is likely to occur at each of the following levels:

- (a) transmission
- (b) distribution substations
- (c) primary distribution
- (d) secondary distribution

Response

For each level described, there is only one hour each year when peak demand is experienced by the Company. The hour of peak demand changes from year to year based on customer load, weather, the economy, and many other often difficult to identify considerations. Therefore it is not possible to estimate the "number of hours during the year" in which the peak demand is likely to occur.

Information Request NEDGC-2-23

(a) For the dollar amounts of distribution investment provided in response to Information Request NEDGC 1-11, identify for each account, year and voltage level, the dollar amounts of new investment related to major system renovations.

(b) Additionally, provide the response to part (a) in test year dollars, using the test year from the cost of service study submitted to the Department in the Company's Last General Rate Case. For example, if the test year of the cost of service study was 1997, provide the response to part (a) in 1997 dollars. Provide complete and detailed documentation for the conversion of the dollar amounts provided in response to part (a) to test year dollars.

Response

The Company objects to this requests because it does not keep records of major system renovations in the form and format requested. Compiling such data would require a time-consuming and burdensome special study. Notwithstanding this objection, the Company will attempt to compile responsive information and will supplement this response when the information is available.

Information Request NEDGC-2-24

Provide the response to NEDGC 1-11 in test year dollars, using the test year from the cost of service study submitted to the Department in the Company's Last General Rate Case. For example, if the test year of the cost of service study was 1997, provide the response to NEDGC 1-11 in 1997 dollars. Provide complete and detailed documentation for the conversion of the dollar amounts provided in response to NEDGC 1-11 to test year dollars.

Response

Please refer to Attachment NEDGC-2-24. The conversion of the dollar amounts was based on the Handy-Whitman index of distribution investments.

Boston Edison Company
Functionalization of the Distribution Plant Account Additions (960-373)
Costs Indexed to Test Year 1991

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
360 Land and Land Rights											
Substation Plant	\$2,440,042	\$14,460	\$914	\$56,928	\$320,246	\$0	\$260,402	\$0	\$0	\$3,693	\$297,823
Primary Plant	\$2,440,042	\$14,460	\$914	\$56,928	\$320,246	\$0	\$260,402	\$0	\$0	\$3,693	\$297,823
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
361 Structures and Improvements											
Substation Plant	-\$4,270,227	\$1,628,778	-\$97,657	\$374,381	-\$11,119,249	\$4,966	-\$4,068,412	-\$892,756	\$36,272,664	\$654,168	\$1,310,535
Primary Plant	-\$4,270,227	\$1,628,778	-\$97,657	\$374,381	-\$11,119,249	\$4,966	-\$4,068,412	-\$892,756	\$36,272,664	\$654,168	\$1,310,535
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
362 Station Equipment											
Substation Plant	\$3,960,940	\$4,191,242	\$7,993,996	\$4,424,136	\$17,337,639	\$1,617,865	\$4,366,651	\$3,137,446	\$39,078,838	\$3,074,367	-\$162,882
Primary Plant	\$3,960,940	\$4,191,242	\$7,993,996	\$4,424,136	\$17,337,639	\$1,617,865	\$4,366,651	\$3,137,446	\$39,078,838	\$3,074,367	-\$162,882
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
363 Storage Battery Equipment											
Substation Plant	\$7,303	\$50,854	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$7,303	\$50,854	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
364 Poles, Towers and Fittings											
Substation Plant	-\$6,677,474	\$1,596,768	\$138,121	\$6,740,651	\$1,522,240	\$2,139,031	\$1,127,525	\$4,467,008	\$5,144,733	\$3,782,604	\$3,354,551
Primary Plant	-\$6,677,474	\$1,596,768	\$138,121	\$6,740,651	\$1,522,240	\$2,139,031	\$1,127,525	\$4,467,008	\$5,144,733	\$3,782,604	\$3,354,551
Secondary Plant	-\$4,555,491	\$1,089,344	\$94,229	\$2,277,692	\$514,371	\$727,877	\$380,995	\$1,509,419	\$1,738,425	\$1,278,156	\$1,133,516
Services and Meters	-\$2,121,984	\$507,425	\$4,892	\$4,482,969	\$1,007,969	\$1,416,244	\$746,530	\$2,957,589	\$2,405,308	\$2,504,448	\$2,221,036
365 Overhead Conductors and Devices											
Substation Plant	-\$476,254	\$6,699,112	\$3,864,171	\$5,292,557	\$2,948,115	\$7,677,644	\$8,121,330	\$14,422,492	\$14,021,984	\$9,975,789	\$4,385,402
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	-\$324,909	\$4,570,252	\$2,636,205	\$2,373,020	\$1,331,911	\$3,468,635	\$4,121,773	\$6,064,065	\$5,334,506	\$4,506,900	\$1,985,772
Services and Meters	-\$151,345	\$2,128,860	\$1,227,965	\$2,919,537	\$1,616,205	\$4,209,008	\$5,001,557	\$7,358,427	\$7,697,078	\$5,468,889	\$2,409,630
366 Underground Conductors and Devices											
Substation Plant	\$15,298,993	\$25,759,929	\$3,646,004	\$9,788,158	\$1,549,376	\$11,717,727	\$10,703,075	\$7,462,826	\$4,358,865	\$3,690,598	\$3,185,061
Primary Plant	\$15,298,993	\$25,759,929	\$3,646,004	\$9,788,158	\$1,549,376	\$11,717,727	\$10,703,075	\$7,462,826	\$4,358,865	\$3,690,598	\$3,185,061
Secondary Plant	\$12,360,698	\$21,619,056	\$2,945,597	\$7,657,291	\$1,197,924	\$8,058,916	\$8,734,650	\$5,789,320	\$3,369,844	\$2,853,200	\$2,452,274
Services and Meters	\$2,939,295	\$5,140,873	\$704,437	\$2,220,922	\$351,552	\$2,658,739	\$2,428,516	\$1,693,307	\$988,022	\$637,393	\$722,687
367 Underground Conductors and Devices											
Substation Plant	\$98,112,409	\$12,708,479	\$96,532,439	\$3,857,667	\$26,150,209	\$27,005,982	\$27,191,351	\$37,291,470	\$37,306,844	\$24,402,348	\$28,052,913
Primary Plant	\$98,112,409	\$12,708,479	\$96,532,439	\$3,857,667	\$26,150,209	\$27,005,982	\$27,191,351	\$37,291,470	\$37,306,844	\$24,402,348	\$28,052,913
Secondary Plant	\$79,263,949	\$10,267,042	\$80,411,175	\$3,172,422	\$22,680,989	\$23,423,230	\$23,584,007	\$32,344,193	\$32,357,527	\$21,165,008	\$24,339,943
Services and Meters	\$18,848,460	\$2,441,437	\$19,121,263	\$465,245	\$3,469,221	\$3,682,752	\$3,607,344	\$4,947,277	\$4,949,317	\$3,237,340	\$3,722,970
368 Line Transformers											
Substation Plant	\$24,657,778	\$29,726,773	\$9,165,187	\$9,887,319	\$12,598,599	\$6,191,952	\$3,672,092	\$12,060,446	\$7,338,007	\$6,659,689	\$5,407,989
Primary Plant	\$24,657,778	\$29,726,773	\$9,165,187	\$9,887,319	\$12,598,599	\$6,191,952	\$3,672,092	\$12,060,446	\$7,338,007	\$6,659,689	\$5,407,989
Secondary Plant	\$729,673	\$879,675	\$271,216	\$696,552	\$915,332	\$449,887	\$268,790	\$876,233	\$533,132	\$483,842	\$392,844
Services and Meters	\$23,928,104	\$28,847,097	\$8,893,970	\$8,890,767	\$11,683,267	\$5,742,066	\$3,405,302	\$11,184,213	\$5,804,875	\$6,175,747	\$5,014,246
369 Services											
Substation Plant	\$3,340,593	\$21,383,173	-\$71,720	\$4,022,021	\$6,016,647	\$3,760,253	\$3,734,654	\$7,716,601	\$6,928,004	\$4,119,093	\$5,182,012
Primary Plant	\$3,340,593	\$21,383,173	-\$71,720	\$4,022,021	\$6,016,647	\$3,760,253	\$3,734,654	\$7,716,601	\$6,928,004	\$4,119,093	\$5,182,012
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
370 Meters											
Substation Plant	\$1,360,931	\$5,600,207	\$936,897	\$1,430,987	\$9,948,834	\$1,620,485	\$11,679,894	\$13,918,041	\$3,790,130	\$5,683,548	\$5,200,329
Primary Plant	\$1,360,931	\$5,600,207	\$936,897	\$1,430,987	\$9,948,834	\$1,620,485	\$11,679,894	\$13,918,041	\$3,790,130	\$5,683,548	\$5,200,329
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
371 Installation on Customer Premises											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
372 Leased Property on Customer Premises											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
373 Street Light and Signal Systems											
Substation Plant	-\$384,725	\$1,144,970	\$3,818	\$661,927	\$15,937	\$84,865	-\$1,540,296	\$2,485,280	\$3,450,334	\$2,242,162	\$4,313,800
Primary Plant	-\$384,725	\$1,144,970	\$3,818	\$661,927	\$15,937	\$84,865	-\$1,540,296	\$2,485,280	\$3,450,334	\$2,242,162	\$4,313,800
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grand Total	\$197,371,337	\$111,475,825	\$725,012,169	\$45,986,742	\$66,650,102	\$51,820,769	\$85,729,462	\$101,088,854	\$157,680,404	\$84,450,584	\$65,526,533

Commonwealth Electric Company
Functionalization of the Distribution Plant Account Additions (360-373)
Costs Incurred to Test Year 1990

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
360 Land and Land Rights											
Substation Plant	\$0	\$0	\$0	\$0	\$9,654	\$22,525	\$49,286	\$23,758	\$92,393	\$6,668	\$4,363
Primary Plant	\$0	\$0	\$0	\$0	\$9,654	\$22,525	\$49,286	\$23,758	\$92,393	\$6,668	\$4,363
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
361 Structures and Improvements											
Substation Plant	\$12,547	\$1,148	\$10,581	\$31,760	\$4,527	\$7,438	\$7,752	\$8,474	\$10,913	\$1,465	\$10,125
Primary Plant	\$12,547	\$1,148	\$10,581	\$31,760	\$4,527	\$7,438	\$7,752	\$8,474	\$10,913	\$1,465	\$10,125
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
362 Station Equipment	\$3,089,476	\$2,678,304	\$214,312	\$280,556	\$1,011,533	\$2,047,007	\$1,360,127	\$545,982	\$708,890	\$243,439	\$217,038
Substation Plant	\$3,089,476	\$2,678,304	\$214,312	\$280,556	\$1,011,533	\$2,047,007	\$1,360,127	\$545,982	\$708,890	\$243,439	\$217,038
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
363 Storage Battery Equipment											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
364 Poles, Towers and Fixtures											
Substation Plant	\$3,682,855	\$4,264,278	\$2,977,905	\$552,322	\$2,375,631	\$2,214,687	\$2,757,338	\$2,277,341	\$2,928,136	\$2,568,048	\$2,719,218
Primary Plant	\$2,375,442	\$2,750,459	\$1,920,749	\$366,248	\$1,532,411	\$1,428,473	\$1,778,463	\$1,468,885	\$1,888,648	\$1,656,391	\$1,753,895
Secondary Plant	\$1,307,414	\$1,513,818	\$1,057,156	\$196,074	\$943,420	\$786,214	\$978,855	\$908,456	\$1,039,488	\$911,657	\$965,322
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
365 Overhead Conductors and Devices											
Substation Plant	\$12,684,054	\$7,231,020	\$7,040,857	\$842,792	\$3,522,650	\$2,720,805	\$4,363,768	\$3,720,803	\$4,343,503	\$3,916,113	\$4,541,284
Primary Plant	\$7,121,364	\$4,056,602	\$3,949,921	\$472,806	\$1,976,207	\$1,526,372	\$2,448,074	\$2,087,370	\$2,436,705	\$2,196,540	\$2,547,666
Secondary Plant	\$5,572,690	\$3,174,418	\$3,090,936	\$369,986	\$1,546,444	\$1,194,434	\$1,916,694	\$1,633,432	\$1,906,798	\$1,719,174	\$1,993,628
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
366 Underground Conduit											
Substation Plant	\$1,144,466	\$523,114	\$899,104	\$326,877	\$625,077	\$1,156,113	\$604,961	\$544,032	\$899,368	\$1,019,380	\$870,425
Primary Plant	\$572,233	\$261,537	\$449,552	\$163,439	\$312,538	\$578,096	\$302,480	\$322,016	\$419,684	\$509,680	\$436,213
Secondary Plant	\$572,233	\$261,537	\$449,552	\$163,439	\$312,538	\$578,096	\$302,480	\$322,016	\$419,684	\$509,680	\$436,213
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
367 Underground Conductors and Devices											
Substation Plant	\$4,481,575	\$2,496,293	\$1,073,913	\$578,571	\$1,956,630	\$1,609,616	\$1,565,225	\$2,286,896	\$5,289,332	\$2,671,597	\$2,559,356
Primary Plant	\$2,957,639	\$1,647,553	\$708,783	\$381,457	\$1,252,696	\$1,062,346	\$1,033,048	\$1,209,417	\$3,477,759	\$1,783,518	\$1,689,175
Secondary Plant	\$1,523,935	\$848,739	\$365,130	\$197,114	\$695,934	\$547,269	\$522,176	\$777,579	\$1,811,573	\$968,479	\$870,181
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
368 Line Transformers											
Substation Plant	\$6,405,012	\$2,665,670	\$7,541,909	\$0	\$3,555,275	\$3,273,486	\$2,242,301	\$2,253,231	\$2,421,282	\$2,256,016	\$1,855,832
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
369 Servitors											
Substation Plant	\$1,515,626	\$3,742,489	\$1,083,131	\$341,825	\$1,214,932	\$1,512,308	\$1,330,359	\$1,229,487	\$1,245,430	\$1,209,639	\$1,250,064
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
370 Meters											
Substation Plant	\$1,940,254	\$590,204	\$73,002	\$0	\$980,782	\$782,353	\$975,205	\$755,840	\$1,084,029	\$1,012,590	\$831,398
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
371 Installation on Customer Premises											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
372 Leased Property on Customer Premises											
Substation Plant	\$167,700	\$281,728	\$560,803	\$120,303	\$326,645	\$0	\$376,935	\$389,828	\$390,105	\$6,655,162	\$8,963,157
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grand Total	\$35,153,564	\$24,474,258	\$21,475,517	\$3,075,110	\$15,585,537	\$15,346,374	\$15,639,256	\$14,135,763	\$18,333,380	\$23,600,707	\$23,836,289

Cambridge Electric Light Company
Functionalization of the Distribution Plant Account Additions (960-373)
Costs Indexed to last year 1992

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
360 Land and Land Rights											
Substation Plant	\$0	\$0	\$0	\$0	\$320	\$538	\$136	\$210	\$177	\$129	\$2,543
Primary Plant	\$0	\$0	\$0	\$0	\$320	\$538	\$136	\$210	\$177	\$129	\$2,543
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
361 Structures and Improvements											
Substation Plant	\$-277,497	\$183,997	\$99,549	\$0	\$0	\$0	\$979	\$0	\$13,043	\$116,305	\$0
Primary Plant	\$-277,497	\$183,997	\$99,549	\$0	\$0	\$0	\$979	\$0	\$13,043	\$116,305	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
362 Station Equipment											
Substation Plant	\$3,934,325	\$2,684,859	\$791,357	\$539,642	\$282,518	\$883,557	\$446,301	\$1,011,757	\$1,003,756	\$928,459	\$294,989
Primary Plant	\$3,934,325	\$2,684,859	\$791,357	\$539,642	\$282,518	\$883,557	\$446,301	\$1,011,757	\$1,003,756	\$928,459	\$294,989
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
363 Storage Battery Equipment											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
364 Poles, Towers and Fixtures											
Substation Plant	\$30,603	\$105,148	\$-3,351	\$72,675	\$294,985	\$294,985	\$110,233	\$82,431	\$153,333	\$115,196	\$153,488
Primary Plant	\$16,128	\$55,413	\$-1,766	\$38,300	\$123,676	\$107,717	\$58,083	\$48,711	\$70,372	\$60,788	\$80,882
Secondary Plant	\$14,475	\$48,735	\$-1,585	\$34,375	\$111,003	\$96,679	\$55,140	\$43,720	\$63,161	\$54,488	\$72,605
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
365 Overhead Conductors and Devices											
Substation Plant	\$216,560	\$300,800	\$19,689	\$179,903	\$334,104	\$281,406	\$153,684	\$199,506	\$274,740	\$190,404	\$246,581
Primary Plant	\$111,960	\$155,513	\$10,372	\$99,010	\$172,450	\$145,450	\$79,480	\$103,145	\$142,060	\$98,450	\$127,588
Secondary Plant	\$104,599	\$145,287	\$9,317	\$80,893	\$161,372	\$135,956	\$74,204	\$95,361	\$132,680	\$91,950	\$119,298
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
366 Underground Conduit											
Substation Plant	\$176,698	\$196,284	\$-5,783	\$246,184	\$115,781	\$454,571	\$301,504	\$292,740	\$327,682	\$752,327	\$288,824
Primary Plant	\$125,986	\$139,958	\$-4,123	\$175,529	\$82,552	\$324,009	\$214,972	\$208,724	\$233,623	\$596,409	\$205,932
Secondary Plant	\$50,712	\$56,326	\$-1,660	\$70,655	\$33,229	\$130,562	\$86,532	\$84,016	\$94,039	\$215,918	\$82,893
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
367 Underground Conductors and Devices											
Substation Plant	\$2,632,280	\$2,479,362	\$727,759	\$1,288,280	\$2,862,937	\$2,256,270	\$1,500,829	\$1,065,259	\$1,397,288	\$774,394	\$1,332,818
Primary Plant	\$2,016,326	\$1,899,191	\$557,463	\$994,463	\$1,980,210	\$1,728,303	\$1,149,635	\$815,968	\$1,070,323	\$593,186	\$1,020,938
Secondary Plant	\$615,953	\$580,171	\$170,296	\$303,798	\$492,727	\$527,967	\$351,194	\$249,271	\$326,965	\$181,208	\$311,879
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
368 Line Transformers											
Substation Plant	\$55,684	\$394,200	\$0	\$304,083	\$233,710	\$176,872	\$153,291	\$148,772	\$155,019	\$86,845	\$88,254
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$55,684	\$394,200	\$0	\$304,083	\$233,710	\$176,872	\$153,291	\$148,772	\$155,019	\$86,845	\$88,254
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
369 Services											
Substation Plant	\$201,681	\$2,578,638	\$45,778	\$18,162	\$147,677	\$149,275	\$130,546	\$18,281	\$143,457	\$137,752	\$132,505
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
370 Meters											
Substation Plant	\$1,044,200	\$192,689	\$0	\$183,118	\$118,988	\$118,988	\$128,514	\$88,629	\$108,021	\$97,792	\$122,607
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
371 Installation on Customer Premises											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
372 Leased Property on Customer Premises											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
373 Street Light and Signal Systems											
Substation Plant	\$6,866	\$4,632	\$5,711	\$53,022	\$79,068	\$86,442	\$209,368	\$242,554	\$108,221	\$258,847	\$289,145
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grand Total	\$8,021,450	\$9,120,620	\$1,660,890	\$2,711,962	\$3,673,914	\$4,612,315	\$3,135,334	\$3,360,149	\$3,654,918	\$3,458,450	\$2,552,065

Information Request NEDGC-2-25

Provide the response to NEDGC 1-12 in test year dollars, using the test year from the cost of service study submitted to the Department in the Company's Last General Rate Case. For example, if the test year of the cost of service study was 1997, provide the response to NEDGC 1-12 in 1997 dollars. Provide complete and detailed documentation for the conversion of the dollar amounts provided in response to NEDGC 1-12 to test year dollars.

Response

Attachment NEDGC-2-25 provides the response to Information Request NEDGC 1-12 in indexed dollars commensurate with the cost of service test year in the last general rate case. With respect to Boston Edison, the distribution O&M expenses for each year during the period 1993 to 2003 were indexed to the year 1991 on the basis of the DRI cost-employment indices. For Commonwealth and Cambridge, the distribution O&M expenses in the years 1993 to 2003 were indexed on the basis of the DRI cost-employment indices to the years 1990 and 1992, respectively.

Boston Edison Company
Functionalization of the Distribution O&M Expenses (580-598)
O&M Expenses Indexed to year 1991 on Basis of DRI Employment Cost

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
580 Operation Supervision and Engineering											
Substation Plant	\$10,076,368	\$12,028,105	\$13,461,726	\$15,976,117	\$10,260,535	\$10,390,075	\$9,002,462	\$8,653,093	\$8,669,041	\$5,923,039	\$8,460,923
Primary Plant	\$1,705,603	\$2,035,969	\$2,276,634	\$2,704,239	\$1,736,776	\$1,758,703	\$1,523,925	\$1,464,688	\$1,467,388	\$1,002,579	\$1,432,160
Secondary Plant	\$4,053,233	\$4,838,322	\$5,414,998	\$6,426,415	\$4,127,314	\$4,179,422	\$3,621,253	\$3,480,719	\$3,487,134	\$2,382,551	\$3,403,418
Services and Meters	\$3,157,973	\$3,769,655	\$4,218,958	\$5,006,978	\$3,215,692	\$3,266,290	\$2,821,407	\$2,711,913	\$2,716,912	\$1,856,304	\$2,651,687
	\$1,159,559	\$1,384,160	\$1,549,136	\$1,838,485	\$1,180,753	\$1,195,660	\$1,035,977	\$995,773	\$997,606	\$681,606	\$973,659
581 Load Dispatching											
Substation Plant	\$2,984,696	\$3,208,042	\$4,100,246	\$3,766,465	\$4,138,053	\$3,347,197	\$2,984,841	\$3,090,166	\$2,227,771	\$2,563,883	\$3,448,507
Primary Plant	\$570,911	\$613,633	\$784,293	\$720,447	\$791,525	\$640,250	\$570,939	\$591,085	\$426,127	\$490,418	\$659,629
Secondary Plant	\$1,356,726	\$1,458,250	\$1,863,812	\$1,712,088	\$1,880,997	\$1,521,505	\$1,356,792	\$1,404,669	\$1,012,657	\$1,165,441	\$1,567,557
Services and Meters	\$1,057,059	\$1,136,159	\$1,452,141	\$1,333,930	\$1,465,531	\$1,185,442	\$1,057,110	\$1,094,412	\$788,986	\$908,024	\$1,221,322
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
582 Station Expenses											
Substation Plant	\$3,731,737	\$3,246,010	\$2,422,952	\$3,250,918	\$3,567,244	\$3,650,423	\$4,063,776	\$4,904,172	\$3,203,244	\$3,567,920	\$3,761,319
Primary Plant	\$3,731,737	\$3,246,010	\$2,422,952	\$3,250,918	\$3,567,244	\$3,650,423	\$4,063,776	\$4,904,172	\$3,203,244	\$3,567,920	\$3,761,319
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
583 Overhead Line Expenses											
Substation Plant	\$4,175,927	\$4,317,507	\$5,076,329	\$3,441,174	\$4,481,673	\$5,923,707	\$6,625,977	\$11,334,688	\$3,712,414	\$4,400,138	\$4,510,469
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$1,759,652	\$1,819,311	\$2,139,063	\$1,450,042	\$1,888,487	\$2,496,132	\$2,792,054	\$4,776,211	\$1,564,337	\$1,854,130	\$1,900,622
Services and Meters	\$2,416,275	\$2,498,196	\$2,937,265	\$1,991,132	\$2,593,185	\$3,427,575	\$3,833,923	\$6,558,477	\$2,148,077	\$2,546,008	\$2,609,848
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
584 Underground Line Expenses											
Substation Plant	\$5,917,533	\$4,438,379	\$5,699,128	\$4,626,081	\$4,778,198	\$6,615,442	\$9,599,400	\$10,593,033	\$4,557,422	\$8,443,604	\$6,496,166
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$5,012,786	\$3,759,784	\$4,827,774	\$3,918,788	\$4,047,647	\$5,603,990	\$8,131,724	\$8,973,438	\$3,860,626	\$7,152,641	\$5,502,951
Services and Meters	\$904,746	\$678,595	\$871,354	\$707,293	\$730,551	\$1,011,451	\$1,467,676	\$1,619,595	\$696,796	\$1,290,964	\$993,215
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
585 Street Lighting and Signal System Expenses											
Substation Plant	\$1,068,855	\$794,493	\$1,034,978	\$1,218,191	\$1,482,548	\$1,199,066	\$446,360	\$178,526	\$286,461	\$374,644	\$672,504
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
586 Meter Expenses											
Substation Plant	\$3,053,555	\$3,554,629	\$3,177,507	\$2,903,667	\$2,617,960	\$3,253,989	\$3,220,807	\$2,195,494	\$4,642,732	\$4,503,333	\$5,672,321
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$3,053,555	\$3,554,629	\$3,177,507	\$2,903,667	\$2,617,960	\$3,253,989	\$3,220,807	\$2,195,494	\$4,642,732	\$4,503,333	\$5,672,321
587 Customer Installations Expenses											
Substation Plant	\$895,096	\$853,040	\$1,126,584	\$1,323,872	\$1,665,022	\$1,498,198	\$1,505,060	\$1,177,571	\$2,315,771	\$2,593,314	\$4,699,850
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$895,096	\$853,040	\$1,126,584	\$1,323,872	\$1,665,022	\$1,498,198	\$1,505,060	\$1,177,571	\$2,315,771	\$2,593,314	\$4,699,850
588 Miscellaneous Expenses											
Substation Plant	\$4,252,814	\$7,996,836	\$5,816,258	\$2,285,343	\$2,271,809	\$7,872,072	\$5,012,401	\$3,568,162	\$14,114,253	\$9,927,795	\$769,393
Primary Plant	\$719,864	\$1,353,605	\$984,843	\$386,835	\$384,544	\$1,332,487	\$846,437	\$603,974	\$2,389,086	\$1,680,454	\$130,233
Secondary Plant	\$1,710,700	\$3,216,738	\$2,340,402	\$919,282	\$913,838	\$3,166,552	\$2,016,245	\$1,435,298	\$5,677,478	\$3,993,469	\$309,490
Services and Meters	\$1,332,849	\$2,506,240	\$1,823,465	\$716,235	\$711,994	\$2,467,138	\$1,570,906	\$1,118,276	\$4,423,462	\$3,111,410	\$241,131
	\$489,402	\$920,253	\$669,548	\$262,991	\$261,433	\$905,895	\$576,813	\$410,614	\$1,624,227	\$1,142,462	\$88,540
589 Rents											
Substation Plant	\$72,779	\$686,874	\$422,150	\$356,096	\$110,738	\$186,435	\$277,356	-\$69,754	\$212,760	\$365,604	\$342,102
Primary Plant	\$12,319	\$116,266	\$71,456	\$60,275	\$18,744	\$31,557	\$46,947	-\$11,807	\$36,013	\$61,885	\$57,907
	\$29,275	\$276,296	\$169,811	\$143,240	\$44,545	\$74,994	\$111,567	-\$28,059	\$85,583	\$147,065	\$137,611

Secondary Plant Services and Meters	\$22,809	\$215,269	\$132,304	\$111,602	\$34,706	\$58,429	\$86,924	-\$21,861	\$66,680	\$114,582	\$107,216
	\$9,376	\$79,044	\$48,580	\$40,978	\$12,743	\$21,454	\$31,917	-\$8,027	\$24,484	\$42,073	\$39,368
590 Maintenance Supervision and Engineering											
Substation Plant	\$1,106,879	\$1,321,257	\$1,478,671	\$2,385,075	\$1,531,795	\$1,551,715	\$1,099,600	\$1,357,864	\$2,681,459	\$3,224,649	\$3,520,254
Primary Plant	\$187,359	\$223,646	\$250,291	\$403,716	\$259,283	\$262,555	\$186,127	\$229,842	\$453,884	\$545,829	\$595,865
Secondary Plant	\$445,244	\$531,478	\$594,797	\$959,399	\$616,167	\$624,179	\$442,316	\$546,203	\$1,078,621	\$1,297,119	\$1,416,027
Services and Meters	\$346,900	\$414,087	\$463,421	\$747,492	\$480,071	\$486,313	\$344,619	\$425,560	\$840,380	\$1,010,618	\$1,103,261
	\$127,376	\$152,046	\$170,161	\$274,467	\$176,275	\$178,567	\$126,539	\$156,259	\$308,575	\$371,083	\$405,101
591 Maintenance of Structures											
Substation Plant	\$224,979	\$353,400	\$368,090	\$80,952	\$141,261	\$204,500	\$212,451	\$290,112	\$177,567	\$286,453	\$201,037
Primary Plant	\$224,979	\$353,400	\$368,090	\$80,952	\$141,261	\$204,500	\$212,451	\$290,112	\$177,567	\$286,453	\$201,037
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
592 Maintenance of Station Equipment											
Substation Plant	\$1,943,405	\$2,476,235	\$2,167,038	\$2,076,508	\$2,331,671	\$1,664,641	\$1,024,395	\$1,279,970	\$2,851,407	\$3,211,384	\$3,441,362
Primary Plant	\$1,943,405	\$2,476,235	\$2,167,038	\$2,076,508	\$2,331,671	\$1,664,641	\$1,024,395	\$1,279,970	\$2,851,407	\$3,211,384	\$3,441,362
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
593 Maintenance of Overhead Lines											
Substation Plant	\$5,135,047	\$7,338,447	\$8,498,236	\$5,829,167	\$5,245,666	\$5,262,255	\$9,376,507	\$4,074,794	\$6,055,198	\$6,176,305	\$9,091,317
Primary Plant	\$2,163,806	\$3,092,275	\$3,580,987	\$2,456,294	\$2,210,419	\$2,217,409	\$3,951,073	\$1,717,037	\$2,551,540	\$2,602,572	\$3,830,989
Secondary Plant	\$2,971,241	\$4,246,172	\$4,917,249	\$3,372,872	\$3,035,247	\$3,044,846	\$5,425,434	\$2,357,757	\$3,503,659	\$3,573,734	\$5,260,418
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
594 Maintenance of Underground Lines											
Substation Plant	\$3,519,234	\$3,484,720	\$2,569,507	\$3,304,559	\$3,515,390	\$4,258,358	\$3,571,198	\$3,776,601	\$7,384,396	\$7,816,862	\$9,598,871
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$2,981,169	\$2,951,932	\$2,176,649	\$2,799,317	\$2,977,914	\$3,607,287	\$3,025,169	\$3,199,167	\$9,255,377	\$6,621,722	\$8,131,276
Services and Meters	\$538,064	\$532,786	\$392,858	\$505,242	\$537,477	\$651,071	\$546,009	\$577,414	\$1,129,019	\$1,195,140	\$1,467,595
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
595 Maintenance of Line Transformers											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$10,558	\$66,928	\$59,042	\$223,282	\$532,687
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$767	\$4,863	\$4,290	\$16,222	\$38,702
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$9,791	\$62,066	\$54,752	\$207,060	\$493,986
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
596 Maintenance of Street Lighting and Signal Systems											
Substation Plant	\$101,541	\$96,562	\$135,547	\$166,334	\$195,318	\$236,814	\$878,730	\$887,414	\$1,235,417	\$1,566,471	\$2,213,860
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$101,541	\$96,562	\$135,547	\$166,334	\$195,318	\$236,814	\$878,730	\$887,414	\$1,235,417	\$1,566,471	\$2,213,860
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
597 Maintenance of Meters											
Substation Plant	\$0	\$5,932	\$12,762	\$0	\$0	\$0	\$0	\$0	\$898,124	\$706,828	\$668,840
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$5,932	\$12,762	\$0	\$0	\$0	\$0	\$0	\$898,124	\$706,828	\$668,840
598 Maintenance of Miscellaneous Distribution Plant											
Substation Plant	\$361,361	\$692,648	-\$640,552	\$7,108,504	\$6,779,906	\$6,292,939	\$5,791,171	\$5,875,362	\$3,568,257	\$3,494,714	\$0
Primary Plant	\$61,170	\$117,243	-\$108,425	\$1,203,239	\$1,147,618	\$1,065,191	\$980,258	\$994,509	\$603,990	\$591,542	\$0
Secondary Plant	\$145,366	\$278,618	-\$257,663	\$2,859,405	\$2,727,226	\$2,531,343	\$2,329,506	\$2,363,372	\$1,435,336	\$1,405,754	\$0
Services and Meters	\$113,288	\$217,079	-\$200,752	\$2,227,833	\$2,124,849	\$1,972,232	\$1,814,976	\$1,841,362	\$1,118,306	\$1,095,257	\$0
	\$41,557	\$79,708	-\$73,713	\$818,026	\$780,212	\$724,173	\$666,431	\$676,120	\$410,625	\$402,162	\$0
Grand Total	\$48,621,827	\$56,893,117	\$56,929,159	\$60,099,021	\$55,114,789	\$63,407,825	\$64,703,051	\$63,234,198	\$68,852,737	\$69,370,224	\$68,101,784
Substation Plant	\$9,157,347	\$10,536,006	\$9,219,172	\$10,887,129	\$10,378,667	\$10,610,407	\$9,457,155	\$10,346,547	\$11,608,707	\$11,438,464	\$10,279,512
Primary Plant	\$19,657,959	\$22,223,005	\$22,850,630	\$23,644,271	\$21,434,555	\$26,022,813	\$27,778,485	\$27,872,937	\$28,638,685	\$28,638,685	\$26,238,551
Secondary Plant	\$14,031,571	\$17,105,294	\$18,178,790	\$18,105,134	\$16,607,169	\$18,996,668	\$20,303,867	\$19,410,911	\$19,008,906	\$18,850,214	\$19,036,043
Services and Meters	\$5,774,950	\$7,028,812	\$6,680,567	\$7,462,487	\$6,694,398	\$7,777,937	\$7,163,544	\$5,603,804	\$11,222,147	\$10,442,861	\$12,547,678

Commonwealth Electric Company
Functionalization of the Distribution O&M Expenses (500-598)
O&M Expenses Indexed to Year 1990 on Basis of DRI Employment Cost

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
580 Operation Supervision and Engineering											
Substation Plant	\$4,613,190	\$4,752,972	\$4,992,683	\$4,990,747	\$683,930	\$1,163,414	\$1,177,770	\$1,057,016	\$1,073,196	\$1,097,254	\$1,406,389
Primary Plant	\$161,878	\$166,793	\$175,126	\$175,126	\$23,999	\$40,824	\$41,328	\$37,091	\$37,659	\$38,503	\$49,351
Secondary Plant	\$1,683,736	\$1,734,755	\$1,821,539	\$1,821,539	\$249,623	\$424,626	\$429,866	\$385,793	\$391,699	\$400,479	\$513,312
Services and Meters	\$2,026,485	\$2,087,889	\$2,193,189	\$2,192,339	\$300,437	\$511,065	\$517,371	\$464,327	\$471,434	\$482,003	\$617,804
	\$741,090	\$763,546	\$802,054	\$801,744	\$109,871	\$166,898	\$169,204	\$169,805	\$172,405	\$176,270	\$225,932
581 Load Dispatching											
Substation Plant	\$1,518,808	\$837,309	\$615,541	\$981,522	\$542,583	\$535,472	\$172,529	\$167,113	\$167,638	\$161,563	\$0
Primary Plant	\$63,496	\$36,005	\$25,733	\$41,034	\$22,683	\$22,386	\$7,213	\$6,986	\$7,008	\$6,755	\$0
Secondary Plant	\$680,436	\$364,034	\$267,661	\$426,803	\$235,936	\$232,844	\$75,022	\$72,667	\$72,895	\$70,262	\$0
Services and Meters	\$794,877	\$438,211	\$322,147	\$513,685	\$283,964	\$280,242	\$90,294	\$87,459	\$87,734	\$84,565	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
582 Station Expenses											
Substation Plant	\$452,612	\$549,967	\$618,404	\$1,117,329	\$627,400	\$453,350	\$388,802	\$426,960	\$512,851	\$390,057	\$433,371
Primary Plant	\$452,612	\$549,967	\$618,404	\$1,117,329	\$627,400	\$453,350	\$388,802	\$426,960	\$512,851	\$390,057	\$433,371
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
583 Overhead Line Expenses											
Substation Plant	\$3,766,025	\$3,308,382	\$3,329,853	\$2,595,594	\$965,036	\$920,523	\$1,039,475	\$1,068,263	\$955,989	\$1,070,035	\$945,223
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$2,249,720	\$1,976,336	\$1,989,163	\$1,550,536	\$576,466	\$549,895	\$620,854	\$638,151	\$571,679	\$609,210	\$564,650
Services and Meters	\$1,516,906	\$1,332,048	\$1,340,691	\$1,045,058	\$386,560	\$370,628	\$416,921	\$430,112	\$365,310	\$430,828	\$390,573
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
584 Underground Line Expenses											
Substation Plant	\$966,387	\$1,113,439	\$1,121,570	\$991,305	\$161,189	\$189,904	\$199,744	\$173,838	\$187,992	\$140,592	\$193,316
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$597,102	\$687,962	\$692,986	\$1,191,951	\$117,306	\$117,306	\$122,798	\$107,409	\$116,155	\$66,868	\$119,445
Services and Meters	\$369,284	\$425,477	\$428,584	\$378,806	\$69,238	\$72,568	\$75,946	\$66,428	\$71,837	\$53,724	\$73,872
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
585 Street Lighting and Signal System Expenses											
Substation Plant	\$481,015	\$705,562	\$807,788	\$699,039	\$603,557	\$673,880	\$723,062	\$815,255	\$959,536	\$968,228	\$859,316
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$481,015	\$705,562	\$807,788	\$699,039	\$603,557	\$673,880	\$723,062	\$815,255	\$959,536	\$968,228	\$859,316
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
586 Meter Expenses											
Substation Plant	\$1,238,186	\$1,522,685	\$1,405,291	\$1,415,836	\$972,170	\$990,473	\$1,547,712	\$1,022,559	\$1,170,763	\$1,091,581	\$1,058,476
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$1,238,186	\$1,522,685	\$1,405,291	\$1,415,836	\$972,170	\$990,473	\$1,547,712	\$1,022,559	\$1,170,763	\$1,091,581	\$1,058,476
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
587 Customer Installations Expenses											
Substation Plant	\$251,716	\$442,743	\$906,507	\$1,025,505	\$1,176,450	\$948,209	\$1,100,341	\$1,135,870	\$1,160,154	\$1,280,624	\$1,293,205
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$251,716	\$442,743	\$906,507	\$1,025,505	\$1,176,450	\$948,209	\$1,100,341	\$1,135,870	\$1,160,154	\$1,280,624	\$1,293,205
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
588 Miscellaneous Expenses											
Substation Plant	\$1,802,997	\$1,115,746	\$2,986,329	\$1,625,599	\$3,565,796	\$2,341,170	\$5,174,663	\$2,654,381	\$2,189,130	\$2,086,976	\$1,907,406
Primary Plant	\$63,267	\$39,152	\$105,142	\$5,705	\$82,152	\$81,590	\$181,590	\$93,143	\$76,817	\$72,591	\$66,931
Secondary Plant	\$658,064	\$407,228	\$1,093,610	\$59,342	\$1,301,456	\$654,487	\$1,898,665	\$968,005	\$798,996	\$764,411	\$696,171
Services and Meters	\$792,022	\$490,125	\$1,316,230	\$71,422	\$1,566,385	\$1,028,431	\$2,273,129	\$1,166,019	\$961,643	\$907,983	\$937,987
	\$289,644	\$179,240	\$481,348	\$26,119	\$572,831	\$376,100	\$531,289	\$426,416	\$351,675	\$332,051	\$306,417
589 Reits											
Substation Plant	\$524,305	\$466,016	\$528,198	\$513,107	\$117,799	\$73,154	\$87,282	\$70,293	\$75,962	\$102,273	\$112,403
Primary Plant	\$18,398	\$16,353	\$22,044	\$18,008	\$4,134	\$2,567	\$3,063	\$2,467	\$2,666	\$3,569	\$3,944
Secondary Plant	\$191,362	\$170,968	\$229,282	\$167,308	\$42,995	\$26,700	\$1,860	\$25,656	\$27,725	\$37,328	\$41,025
Services and Meters	\$230,317	\$204,712	\$275,955	\$51,747	\$32,547	\$36,346	\$36,346	\$30,878	\$33,369	\$44,926	\$49,377
	\$64,227	\$74,864	\$100,918	\$62,443	\$19,924	\$11,752	\$14,023	\$11,292	\$12,203	\$16,430	\$18,057
590 Maintenance Supervision and Engineering											
Substation Plant	\$8,668	\$1,275,066	\$26,510	\$0	\$452,931	\$960,809	\$921,780	\$1,000,255	\$906,601	\$764,879	\$1,072,791
Primary Plant	\$304	\$44,742	\$930	\$0	\$15,893	\$30,205	\$32,345	\$365,076	\$31,813	\$26,840	\$37,644
Secondary Plant	\$3,164	\$465,374	\$9,676	\$0	\$165,312	\$334,434	\$336,434	\$365,076	\$330,894	\$279,168	\$391,551
Services and Meters	\$3,807	\$560,108	\$11,645	\$0	\$198,964	\$376,137	\$439,393	\$439,393	\$395,996	\$395,996	\$471,256
	\$1,392	\$204,833	\$4,259	\$0	\$72,762	\$138,285	\$148,080	\$160,687	\$145,642	\$122,875	\$172,340
591 Maintenance of Structures											
	\$5,968	\$10,571	\$18,825	\$6,738	\$30,450	\$41,352	\$86,637	\$52,696	\$11,717	\$9,809	\$192,547

Substation Plant	\$5,968	\$10,571	\$18,825	\$6,738	\$30,450	\$41,352	\$86,637	\$52,686	\$11,717	\$9,009	\$192,547
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
592 Maintenance of Station Equipment											
Substation Plant	\$233,058	\$313,898	\$366,703	\$368,515	\$642,635	\$437,869	\$553,755	\$576,653	\$601,491	\$289,252	\$307,888
Primary Plant	\$233,058	\$313,898	\$366,703	\$368,515	\$642,635	\$437,869	\$553,755	\$576,653	\$601,491	\$289,252	\$307,888
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
593 Maintenance of Overhead Lines											
Substation Plant	\$4,057,984	\$4,870,411	\$4,038,566	\$2,942,096	\$7,394,809	\$4,132,209	\$5,424,374	\$5,788,965	\$4,372,875	\$4,022,302	\$4,591,473
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$2,424,128	\$2,909,450	\$2,412,540	\$1,757,527	\$4,417,455	\$2,468,468	\$3,240,372	\$3,458,778	\$2,612,235	\$2,402,813	\$2,742,819
Services and Meters	\$1,633,856	\$1,960,962	\$1,626,046	\$1,184,569	\$2,977,354	\$1,663,741	\$2,184,002	\$2,331,207	\$1,760,640	\$1,619,490	\$1,848,653
594 Maintenance of Underground Lines											
Substation Plant	\$428,630	\$567,288	\$680,564	\$821,976	\$869,564	\$883,349	\$704,167	\$668,941	\$536,106	\$601,538	\$648,785
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$264,838	\$350,511	\$420,501	\$507,875	\$537,278	\$545,796	\$435,085	\$413,319	\$331,244	\$371,673	\$400,853
Services and Meters	\$163,792	\$216,777	\$260,063	\$314,101	\$332,285	\$337,553	\$269,083	\$255,622	\$204,862	\$228,865	\$247,912
595 Maintenance of Line Transformers											
Substation Plant	\$0	\$0	\$0	\$3,836	\$430,344	\$310,732	\$263,945	\$326,958	\$335,689	\$372,895	\$323,810
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$3,836	\$430,344	\$310,732	\$263,945	\$326,958	\$335,689	\$372,895	\$323,810
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
596 Maintenance of Street Lighting and Signal Systems											
Substation Plant	\$16,667	\$11,402	\$52,717	\$56,977	\$193,114	\$215,212	\$215,766	\$176,289	\$231,883	\$218,933	\$189,764
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$16,667	\$11,402	\$52,717	\$56,977	\$193,114	\$215,212	\$215,766	\$176,289	\$231,883	\$218,933	\$189,764
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
597 Maintenance of Meters											
Substation Plant	\$0	-\$421	\$922	\$0	\$28,940	\$2,871	\$58,624	\$42,736	\$58,838	\$50,591	\$58,716
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	-\$421	\$922	\$0	\$28,940	\$2,871	\$58,624	\$42,736	\$58,838	\$50,591	\$58,716
598 Maintenance of Miscellaneous Distribution Plant											
Substation Plant	\$246,493	\$308,300	\$891,852	\$2,423,647	\$370,507	\$160,757	\$153,070	\$166,269	\$189,300	\$212,582	\$216,883
Primary Plant	\$8,649	\$10,818	\$31,295	\$85,046	\$13,001	\$5,641	\$5,371	\$5,834	\$6,643	\$7,460	\$7,610
Secondary Plant	\$89,966	\$112,524	\$325,511	\$884,590	\$135,229	\$58,674	\$55,668	\$60,685	\$69,091	\$77,589	\$79,159
Services and Meters	\$108,280	\$135,430	\$391,773	\$1,064,661	\$162,756	\$70,618	\$67,241	\$73,039	\$83,156	\$93,383	\$95,272
	\$39,598	\$49,527	\$143,272	\$389,349	\$59,520	\$25,825	\$24,590	\$26,710	\$30,410	\$34,150	\$34,841
Grand Total	\$20,612,707	\$22,171,328	\$23,498,845	\$21,157,449	\$19,849,202	\$15,334,709	\$19,992,507	\$17,392,329	\$15,658,710	\$14,921,985	\$15,811,764
Substation Plant	\$1,007,630	\$1,187,288	\$1,364,271	\$1,818,501	\$1,505,320	\$1,116,348	\$1,300,084	\$1,236,928	\$1,288,864	\$844,785	\$1,099,288
Primary Plant	\$8,822,515	\$9,178,322	\$9,263,173	\$7,808,020	\$7,773,720	\$5,593,007	\$7,236,937	\$6,496,339	\$5,322,613	\$5,119,800	\$5,548,985
Secondary Plant	\$8,136,707	\$8,568,701	\$9,026,829	\$7,789,931	\$7,558,695	\$5,944,941	\$7,641,627	\$6,662,986	\$5,985,345	\$5,843,818	\$5,995,496
Services and Meters	\$2,645,854	\$3,237,016	\$3,844,572	\$3,740,996	\$3,011,467	\$2,680,413	\$3,913,863	\$2,996,076	\$3,102,089	\$3,114,572	\$3,167,985

Cambridge Electric Light Company
Functionalization of the Distribution O&M Expenses (580-598)
O&M Expenses Indexed to year 1992 on Basis of DRI Employment Cost

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
580 Operation Supervision and Engr											
Substation Plant	\$334,906	\$412,032	\$746,409	\$1,268,091	\$280,445	\$339,790	\$434,024	\$304,631	\$297,455	\$309,937	\$395,562
Primary Plant	\$105,110	\$129,316	\$234,260	\$397,989	\$88,017	\$106,643	\$136,218	\$95,608	\$93,356	\$97,273	\$124,147
Secondary Plant	\$126,633	\$155,796	\$282,229	\$479,485	\$106,041	\$128,480	\$164,111	\$115,186	\$112,472	\$117,192	\$149,588
Services and Meters	\$72,373	\$89,040	\$161,299	\$274,034	\$60,604	\$73,428	\$93,792	\$65,831	\$64,280	\$66,977	\$85,481
	\$30,790	\$37,681	\$68,622	\$116,584	\$25,783	\$31,239	\$39,903	\$28,007	\$27,347	\$28,495	\$36,367
581 Load Dispatching											
Substation Plant	\$88,563	\$140,548	\$-14,436	\$400,529	\$263,782	\$265,319	\$81,900	\$79,063	\$80,020	\$76,157	\$0
Primary Plant	\$30,609	\$48,577	\$-14,321	\$138,433	\$91,169	\$91,701	\$28,307	\$27,326	\$27,657	\$26,322	\$0
Secondary Plant	\$36,877	\$58,524	\$-17,254	\$166,779	\$109,838	\$110,478	\$34,103	\$32,922	\$33,320	\$31,712	\$0
Services and Meters	\$21,076	\$33,448	\$-9,861	\$95,317	\$62,774	\$63,140	\$19,491	\$18,815	\$19,043	\$18,124	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
582 Station Expenses											
Substation Plant	\$541,964	\$287,576	\$389,376	\$167,829	\$46,523	\$54,440	\$90,290	\$111,782	\$97,115	\$83,059	\$101,588
Primary Plant	\$541,964	\$287,576	\$389,376	\$167,829	\$46,523	\$54,440	\$90,290	\$111,782	\$97,115	\$83,059	\$101,588
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$137,226	\$70,299	\$434,888	\$468,252	\$490,674	\$474,959	\$495,786	\$411,292	\$543,326	\$486,062	\$507,259
583 Overhead Line Expenses											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$71,337	\$36,545	\$226,077	\$243,421	\$255,078	\$246,908	\$259,815	\$213,811	\$282,449	\$252,680	\$263,700
Secondary Plant	\$65,889	\$33,754	\$208,811	\$224,630	\$235,596	\$228,051	\$239,972	\$197,481	\$260,877	\$233,382	\$243,560
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$158,168	\$159,474	\$232,924	\$198,984	\$246,389	\$275,101	\$184,409	\$212,557	\$145,053	\$181,679	\$164,945
584 Underground Line Expenses											
Substation Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Primary Plant	\$118,090	\$119,065	\$173,904	\$148,564	\$183,957	\$205,394	\$137,682	\$158,688	\$108,299	\$135,644	\$123,150
Secondary Plant	\$40,078	\$40,408	\$59,020	\$50,420	\$62,432	\$69,707	\$46,727	\$53,860	\$36,755	\$46,035	\$41,795
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$158,168	\$159,474	\$232,924	\$198,984	\$246,389	\$275,101	\$184,409	\$212,557	\$145,053	\$181,679	\$164,945
585 Street Lighting and Signal Systei											
Substation Plant	\$2,704	\$184	\$16,278	\$85,963	\$93,188	\$92,299	\$106,595	\$99,140	\$99,659	\$100,094	\$96,674
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$2,704	\$184	\$16,278	\$85,963	\$93,188	\$92,299	\$106,595	\$99,140	\$99,659	\$100,094	\$96,674
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$2,704	\$184	\$16,278	\$85,963	\$93,188	\$92,299	\$106,595	\$99,140	\$99,659	\$100,094	\$96,674
586 Meter Expenses											
Substation Plant	\$178,958	\$212,368	\$248,167	\$235,722	\$202,783	\$180,135	\$191,338	\$205,626	\$159,938	\$105,723	\$102,571
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$178,958	\$212,368	\$248,167	\$235,722	\$202,783	\$180,135	\$191,338	\$205,626	\$159,938	\$105,723	\$102,571
587 Customer Installations Expenses											
Substation Plant	\$31,755	\$29,263	\$44,255	\$77,071	\$114,138	\$53,031	\$37,557	\$92,699	\$81,816	\$159,497	\$152,490
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$31,755	\$29,263	\$44,255	\$77,071	\$114,138	\$53,031	\$37,557	\$92,699	\$81,816	\$159,497	\$152,490
588 Miscellaneous Expenses											
Substation Plant	\$422,402	\$357,998	\$842,795	\$224,207	\$122,740	\$367,424	\$639,370	\$183,215	\$190,174	\$209,772	\$241,604
Primary Plant	\$132,570	\$112,357	\$264,510	\$70,367	\$38,522	\$115,315	\$200,665	\$57,502	\$59,686	\$65,837	\$65,837
Secondary Plant	\$159,717	\$135,364	\$84,776	\$318,673	\$46,410	\$138,928	\$241,755	\$69,276	\$71,908	\$79,318	\$91,354
Services and Meters	\$91,281	\$77,363	\$182,128	\$48,451	\$26,524	\$79,400	\$136,167	\$39,593	\$41,096	\$45,332	\$52,210
	\$38,634	\$32,913	\$77,484	\$20,613	\$11,284	\$33,780	\$58,781	\$16,844	\$17,484	\$19,286	\$22,212
589 Rents											
Substation Plant	\$380,276	\$92,218	\$253,277	\$279,689	\$462,066	\$434,098	\$388,833	\$41,079	\$3,868	\$2,498	\$1,948
Primary Plant	\$119,349	\$28,943	\$79,491	\$87,780	\$122,893	\$136,241	\$122,035	\$12,893	\$12,893	\$784	\$611
Secondary Plant	\$143,788	\$34,869	\$95,768	\$105,755	\$174,714	\$164,139	\$147,024	\$15,533	\$1,462	\$945	\$736

Secondary Plant Services and Meters	\$82,178 \$34,961	\$19,928 \$8,478	\$54,733 \$23,285	\$60,441 \$25,714	\$99,852 \$42,481	\$83,808 \$39,910	\$84,027 \$35,748	\$8,877 \$3,777	\$836 \$356	\$540 \$230	\$421 \$179
590 Maintenance Supervision and Er Substation Plant	\$1,815 \$570	\$101,208 \$31,764	\$5,057 \$1,587	\$0 \$0	\$283,134 \$88,861	\$232,456 \$72,966	\$157,159 \$49,324	\$147,394 \$46,259	\$133,051 \$41,768	\$131,704 \$41,335	\$185,001 \$57,435
Primary Plant	\$886	\$36,288	\$1,912	\$0	\$107,057	\$87,895	\$59,424	\$55,732	\$50,309	\$49,799	\$88,196
Secondary Plant	\$392	\$21,871	\$1,093	\$0	\$61,185	\$33,962	\$33,962	\$31,852	\$28,752	\$28,461	\$39,547
Services and Meters	\$167	\$8,305	\$465	\$0	\$26,030	\$21,371	\$14,449	\$13,551	\$12,232	\$12,108	\$16,825
591 Maintenance of Structures Substation Plant	\$5,286 \$5,286	\$20,873 \$20,873	\$32,014 \$32,014	\$5,009 \$5,009	\$27,007 \$27,007	\$29,409 \$29,409	\$26,576 \$26,576	\$55,151 \$55,151	\$35,426 \$35,426	\$65,933 \$65,933	\$49,968 \$49,968
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
592 Maintenance of Station Equipme Substation Plant	\$170,591 \$170,591	\$132,933 \$132,933	\$190,360 \$190,360	\$240,758 \$240,758	\$435,066 \$435,066	\$350,844 \$350,844	\$97,103 \$97,103	\$109,928 \$109,928	\$107,651 \$107,651	\$148,543 \$148,543	\$141,782 \$141,782
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
593 Maintenance of Overhead Lines Substation Plant	\$78,791 \$0	\$207,981 \$0	\$249,947 \$0	\$298,716 \$0	\$546,148 \$0	\$298,538 \$0	\$261,614 \$0	\$292,526 \$0	\$308,620 \$0	\$236,021 \$0	\$240,713 \$0
Primary Plant	\$40,960	\$108,119	\$129,935	\$155,288	\$283,916	\$155,196	\$136,000	\$152,070	\$160,436	\$122,696	\$125,135
Secondary Plant	\$37,831	\$99,862	\$120,012	\$143,428	\$262,232	\$143,343	\$125,613	\$140,456	\$148,183	\$113,325	\$115,578
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
594 Maintenance of Underground Li Substation Plant	\$179,595 \$0	\$74,509 \$0	\$54,649 \$0	\$219,894 \$0	\$414,642 \$0	\$275,281 \$0	\$188,943 \$0	\$184,768 \$0	\$179,032 \$0	\$155,610 \$0	\$217,882 \$0
Primary Plant	\$134,088	\$55,630	\$40,802	\$164,176	\$309,576	\$205,528	\$141,067	\$137,950	\$133,667	\$116,180	\$162,673
Secondary Plant	\$45,507	\$18,880	\$13,847	\$55,719	\$105,065	\$69,753	\$47,876	\$46,818	\$45,365	\$39,430	\$55,209
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
595 Maintenance of Line Transforme Substation Plant	\$0 \$0	\$0 \$0	\$0 \$0	\$8 \$0	\$2,468 \$0	\$250 \$0	\$3,031 \$0	\$3,309 \$0	\$6,740 \$0	\$855 \$0	\$0 \$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$8	\$2,468	\$250	\$3,031	\$3,309	\$6,740	\$855	\$0
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
596 Maintenance of Street Lighting a Substation Plant	\$0 \$0	\$0 \$0	\$2,725 \$0	\$14,351 \$0	\$25,092 \$0	\$29,876 \$0	\$41,264 \$0	\$30,277 \$0	\$29,645 \$0	\$36,477 \$0	\$64,613 \$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$2,725	\$14,351	\$25,092	\$29,876	\$41,264	\$30,277	\$29,645	\$36,477	\$64,613
Services and Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
597 Maintenance of Meters Substation Plant	\$0 \$0	\$63 \$0	\$12,726 \$0	\$0 \$0	\$55,876 \$0	\$34,142 \$0	\$41,320 \$0	\$25,647 \$0	\$54,594 \$0	\$36,951 \$0	\$77,490 \$0
Primary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Secondary Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services and Meters	\$0	\$63	\$12,726	\$0	\$55,876	\$34,142	\$41,320	\$25,647	\$54,594	\$36,951	\$77,490
598 Maintenance of Miscellaneous D Substation Plant	\$51,239 \$16,081	\$55,382 \$17,382	\$198,794 \$62,391	\$474,567 \$148,942	\$55,814 \$17,517	\$39,651 \$12,444	\$31,548 \$9,901	\$44,084 \$13,836	\$37,308 \$11,709	\$29,310 \$9,199	\$46,140 \$14,481
Primary Plant	\$19,374	\$20,941	\$75,167	\$179,441	\$21,104	\$14,993	\$11,929	\$16,669	\$14,107	\$11,082	\$17,446
Secondary Plant	\$11,073	\$11,968	\$42,959	\$102,554	\$8,617	\$8,569	\$6,817	\$9,527	\$6,334	\$6,334	\$9,971
Services and Meters	\$4,711	\$5,092	\$18,276	\$43,630	\$5,131	\$3,645	\$2,900	\$4,053	\$3,430	\$2,695	\$4,242
Grand Total	\$2,764,241	\$2,354,910	\$3,913,206	\$4,659,642	\$4,167,974	\$3,827,044	\$3,502,660	\$2,634,169	\$2,590,490	\$2,555,860	\$2,786,229
Substation Plant	\$1,122,131	\$809,720	\$1,239,668	\$1,257,108	\$977,701	\$969,993	\$760,419	\$530,285	\$475,572	\$538,285	\$595,837
Primary Plant	\$851,551	\$763,121	\$1,327,213	\$1,727,684	\$1,597,691	\$1,457,939	\$1,332,910	\$967,846	\$968,429	\$917,247	\$1,002,958
Secondary Plant	\$470,383	\$446,706	\$853,043	\$1,155,516	\$1,109,075	\$1,001,859	\$987,334	\$745,835	\$789,292	\$735,365	\$805,057
Services and Meters	\$320,176	\$335,362	\$493,281	\$519,333	\$483,507	\$397,253	\$421,997	\$390,203	\$357,198	\$364,984	\$412,376